

The Trail Ahead: North Carolina Oyster Tourism and the North Carolina Oysters Brand

Presented at the office of the Economic Development Partnership of North Carolina May 2, 2018









Our team has drawn upon a large number and wide range of research sources

Primary sources

26 interviews with subject matter experts and stakeholders

Survey of 320 consumers

Survey of 12 restaurants

Visits:

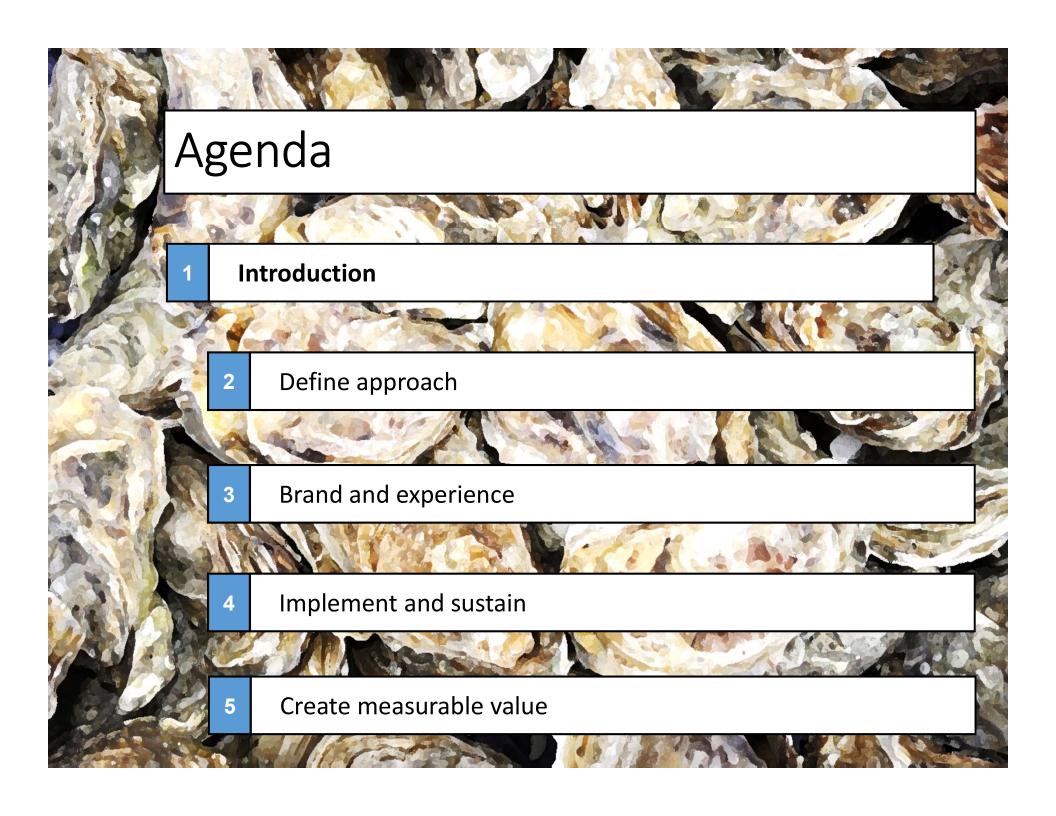
- To 4 oyster leases
- 10 prospective sites

Secondary sources

126 reports from **60** institutions, including:

- Visit NC
- NC Sea Grant
- NC Dept. of Commerce
- VA Sea Grant
- Roland Berger
- NC Rural Economic
 Development Center

Assessments of 9 comparable trails







Our primary goals for the North Carolina Oyster Trail

Substantial contributions to:

- 1 Economic growth in Tier 1 and Tier 2 coastal counties
- 2 Statewide collaboration of stakeholders and subject matter experts
- 3 Increase in sales of North Carolina Oysters
- Mariculture Plan that maximizes ecosystem services of wild oysters
- Statewide pride in North Carolina Oysters and the people and places that produce them

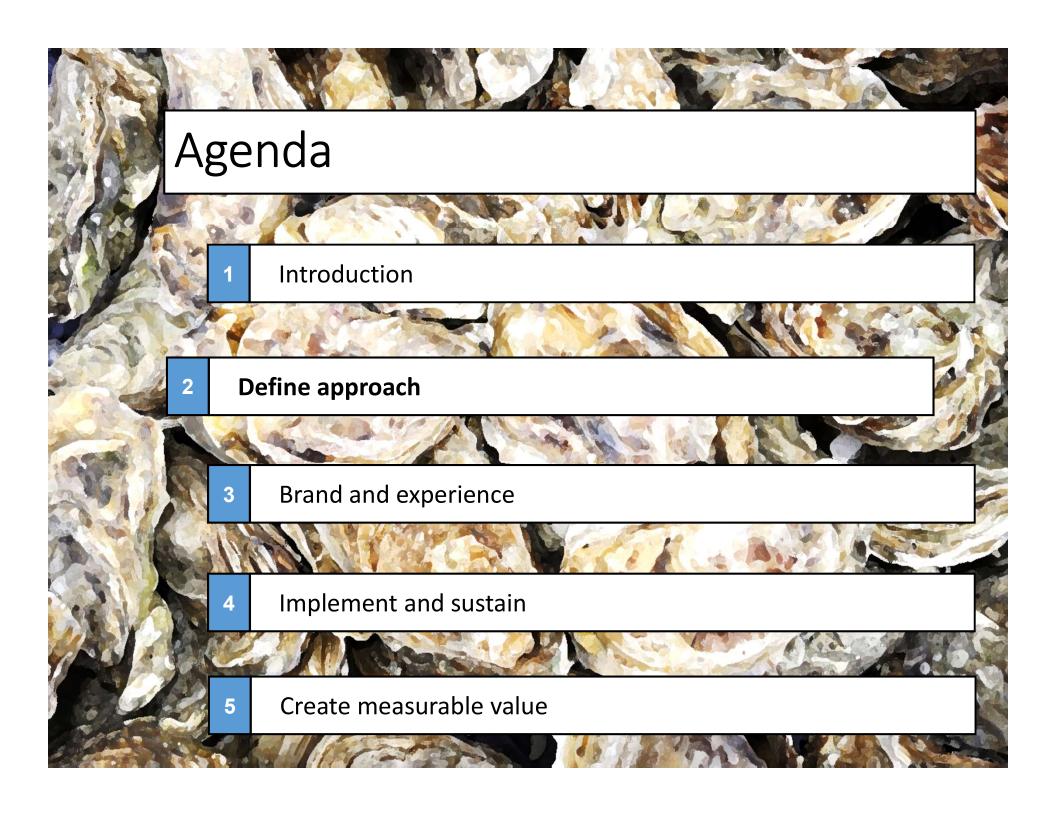




Executive Summary

How do we design an implementable blueprint for a North Carolina Oyster Trail that maximizes the economic and environmental benefits of oyster proliferation in North Carolina waters?

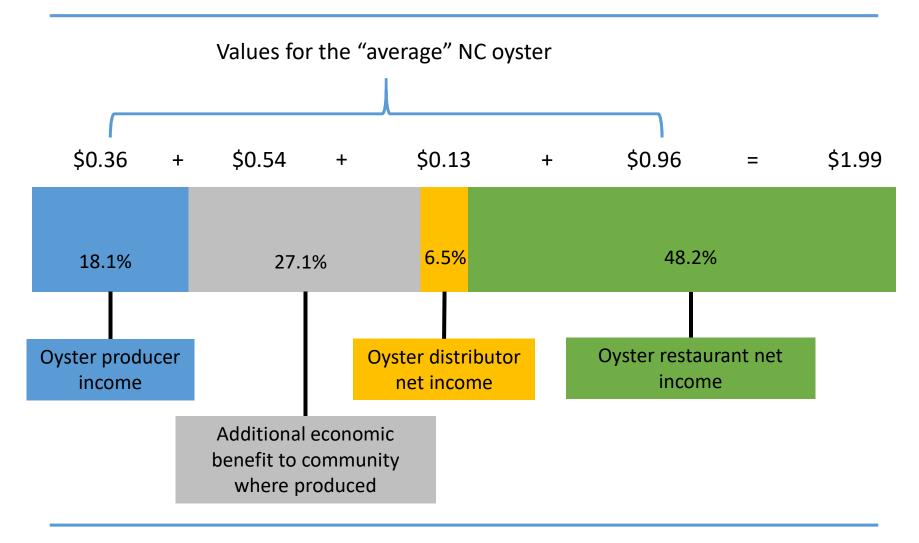
- Develop a brand for North Carolina Oysters built on the imagery and experiences of the North Carolina Oyster Trail
- Cater experiences to a wide variety of visitors and residents at sites across North Carolina
- 3 Foster collaboration between NC business, organizations, and state agencies
- Invest resources to create brand infrastructure and plan for long-term sustained growth and impact







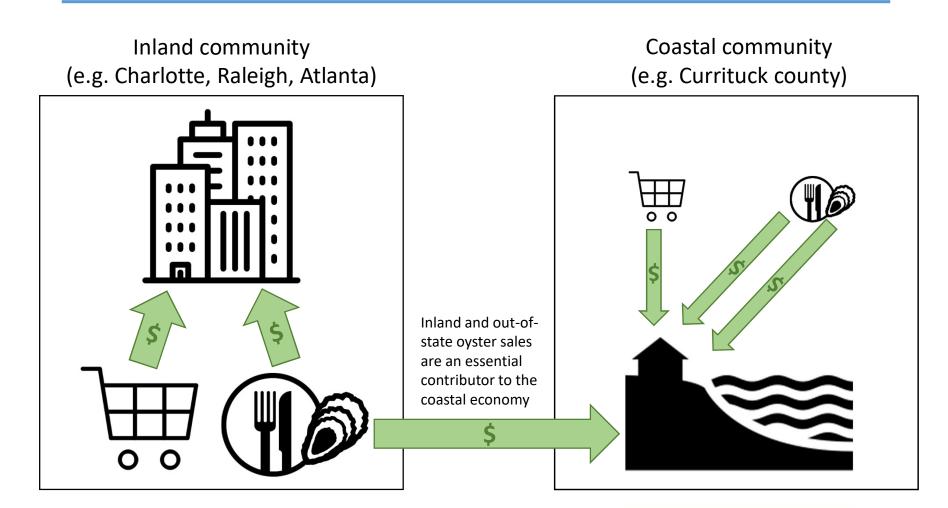
For every North Carolina oyster sold, the total economic impact is distributed between four main stakeholders







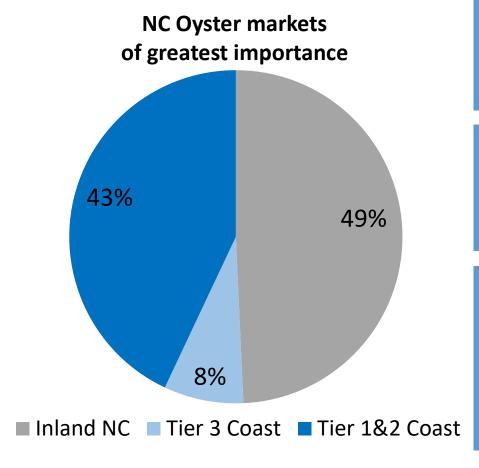
In addition to capturing local visitor spending, coastal communities benefit from inland and out-of-state oyster sales







To maximize economic benefits to Tier 1 & Tier 2 coastal counties, inland markets must be leveraged



Inland areas will boost overall benefit to coastal counties due to higher sales volumes and higher prices¹

Average restaurant prices for half shell oysters are slightly higher in inland urban areas than on the coast¹

Visitors interested in visiting inland urban areas were willing to pay more than **twice as much** for a half-shell oyster than visitors only interested in visiting the coast²

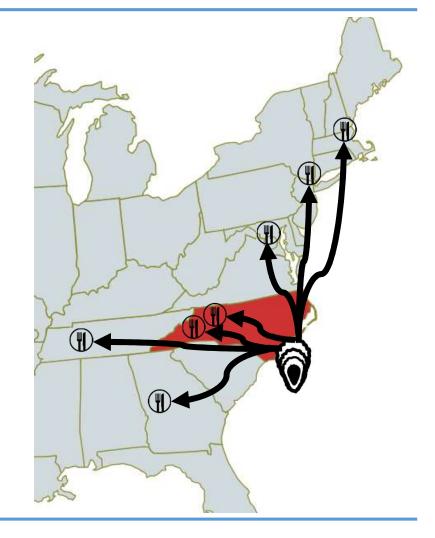




To sustain growth and reach its potential, North Carolina's oyster industry must export oysters outside of the state

Virginia exports >74% of its oysters to other states ¹

NC Oysters will not have a "local advantage" in other states







Establishing the NC Oysters brand will bring identity and trust to the product while differentiating it from the competition

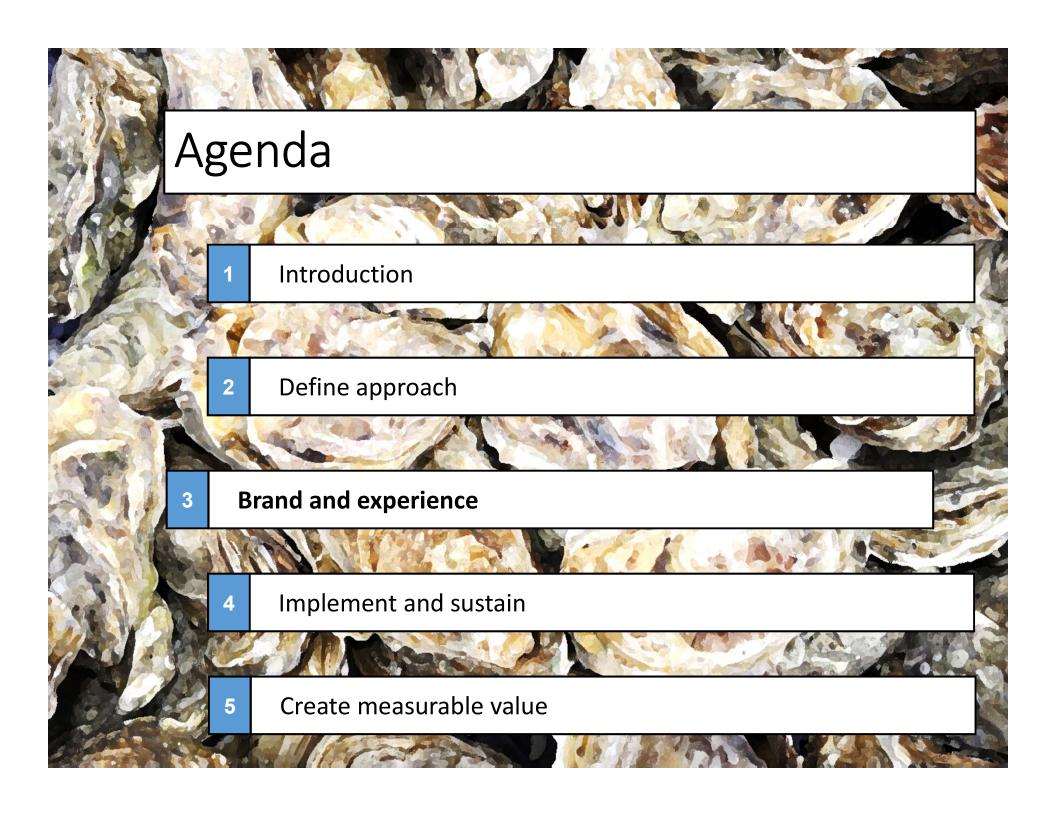






The Oyster Trail communicates the North Carolina Oysters brand to consumers and engages key stakeholders

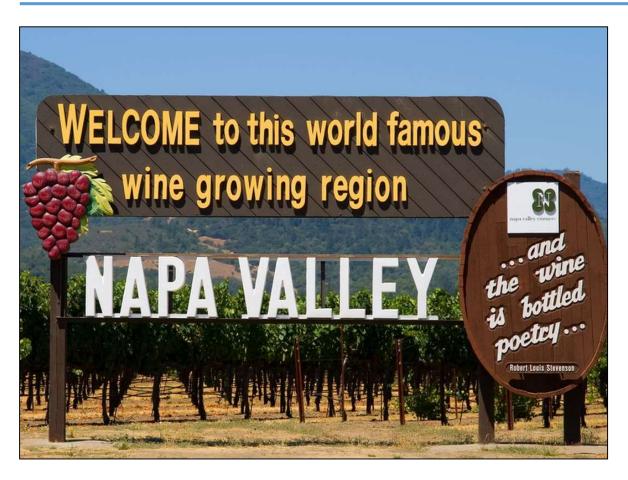








North Carolina could be the "Napa Valley of oysters"

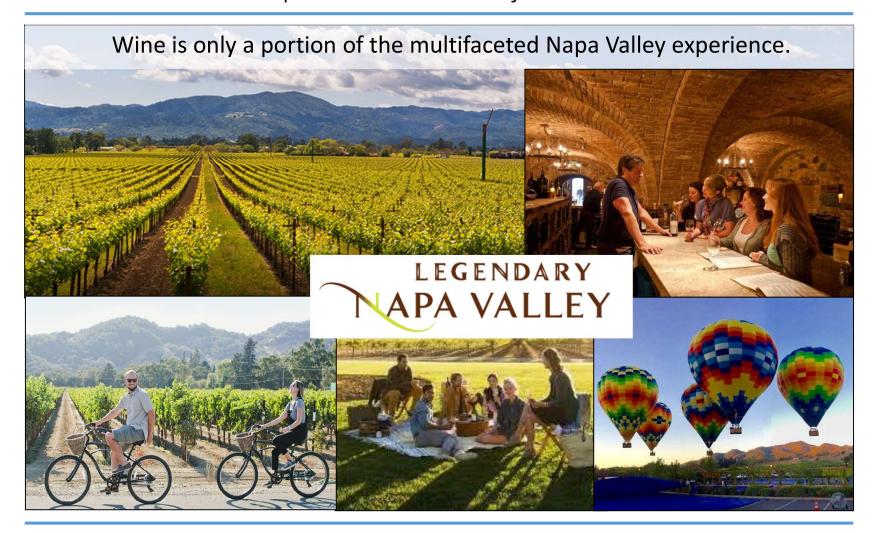


- Napa Valley brand adds value to all Napa wines
- Adds value to wines regardless of where they are sold
- People perceive
 Napa as being
 synonymous with
 the very best
 American wine





The imagery Napa Valley evokes and the consistency of the brand are what make it so powerful—it's not just the wine







There are many parallels between wine and oysters that make Napa Valley a good model



Terroir

The characteristic tastes and mouthfeel of a wine imparted to it by the environment in which it was produced—including soil content, temperature and water fluctuations, and other factors.



Merroir

The tastes, size, shape, color, and texture of an oyster imparted to it by its environment and growing conditions—including salinity, seagrasses, maturity, and other factors.

Other parallels

- Encouraged to try many varieties to experience different flavors
- Products are highly influenced by where they are grown
- Winemakers and oyster growers play very similar roles
- Napa Valley and North Carolina both offer many complementary activities with fun associated imagery





Building a North Carolina Oysters brand must include educating consumers about oysters

- Basic wine knowledge has a high penetration in the general population
- Relatively few people, including North Carolina seafood restaurant owners, possess basic oyster knowledge

Oyster education opportunities

Only 18%¹ of consumers surveyed (29%² of restaurants) know oysters are safe and good to eat in the summer

"The 'R Rule' goes back hundreds of years, but that had to do with when it was all a wild harvest... Now that it's all farmed oysters and they're all coming out of hatcheries, you don't really need to pay attention to that rule." ³

Rowan Jacobsen, oyster expert & author of The Essential Oyster

Only 32%¹ of consumers surveyed (43%² of restaurants) had any familiarity with merroir concept





The brand should tie North Carolina Oysters with imagery of North Carolina's well-known beaches and pristine coastal waters







A focus on the unique merroir, people, and history of North Carolina Oysters is another potential brand approach







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The North Carolina Oyster Trail will cater experiences to a diverse array of visitors and locals alike

Oyster familiarity



Urban and urbane

- Discusses merroir with dining companions
- Visits winery tasting room on Trail after work for oyster and wine pairings

P

Pamlico pilgrim

- Discusses merroir with the grower at an oyster festival
- Drives to the coast to volunteer helping the Coastal Federation lay cultch on the weekends



Neighborhood newbie

- New to oysters
- Visits Trail brewery with friends after work and tries an oyster stout with some fried oysters



Adventurer

- New to oysters
- Not afraid to hop in a car or kayak to see every corner or North Carolina

Trail enthusiasm





North Carolina Oyster trail will be organized into regions that feature a variety of food and beverage, cultural, and natural sites

Choose your own oyster experience:

Restaurant Brewery Winery

Historic Site

Aquarium

Museum

Natural Site

Eco-tour

Outdoor activity

For the connoisseur:



For the beer lover:



For the history buff:



For the science nerd:



For the outdoorsman:







The NC Oyster Trail will have a variety of food and beverage sites...



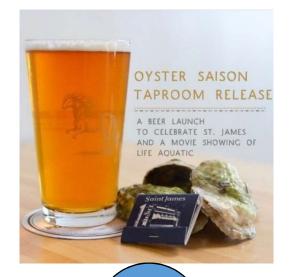
Ex. Captain Georges Seafood Kill Devil Hills, NC







Ex. Ponysaurus Brewing Company Durham, NC



Food and Beverage



Ex. RayLen Vineyards and Winery Mocksville, NC









...as well as cultural and historical sites...



Ex. Pine Knoll Shores Aquarium
Pine Knoll Shores, NC



Ex. Fort Macon State Park Bogue Banks, NC



Ex. NC Maritime Museum Beaufort, NC















...and natural and outdoor sites



Ex. Sandbar Oyster Company Beaufort, NC



Ex. Living Shoreline Newport, NC



Ex. Roosevelt Natural Area Paddle Trip Pine Knoll Shores, NC







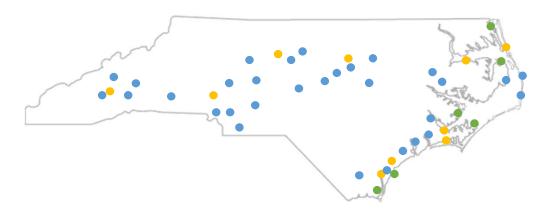
Outdoor & Natural Sites





The Trail organization and supporting infrastructure will connect sites to present visitors with a cohesive, on-brand experience

Without organizing structure, responsibility for communicating the NC Oysters brand would be diffused across dozens of sites



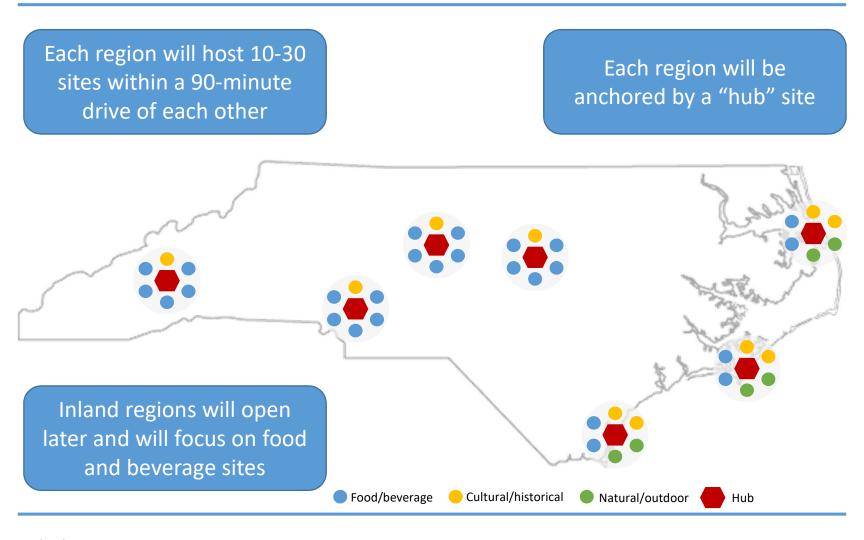
Diffusing responsibilities
will result in
inconsistency with
centralized branding
efforts

Visitors may be overwhelmed by options and will have difficulty knowing how to organize visits





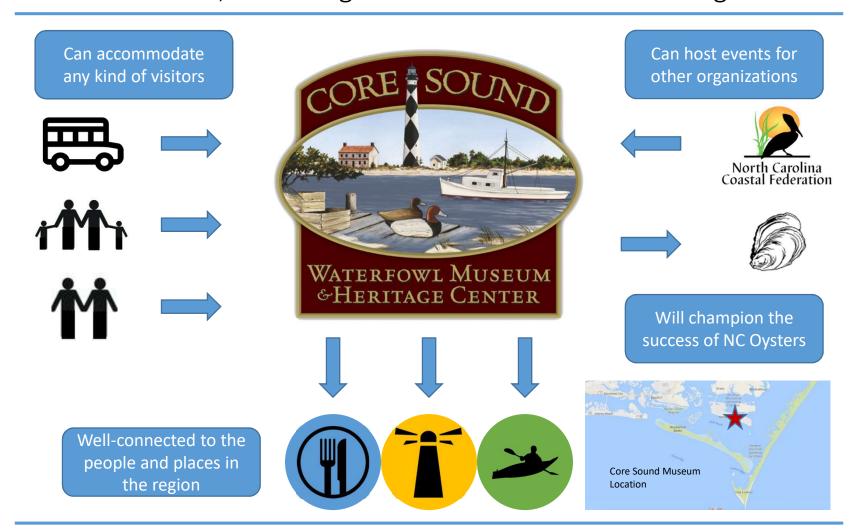
The regional model will provide visitors with a "pre-packaged" oyster experience in several popular areas within the state







Hub sites are non-profit champion institutions, such as the Core Sound Museum, at the organizational centers of each region







The Core Sound Museum is also an exemplary hub because of its deep connection to the culture of rural coastal North Carolina

"The Core Sound Museum is the cultural heart of Down East.
Everything we do is through the support and hard work of volunteers in this community."





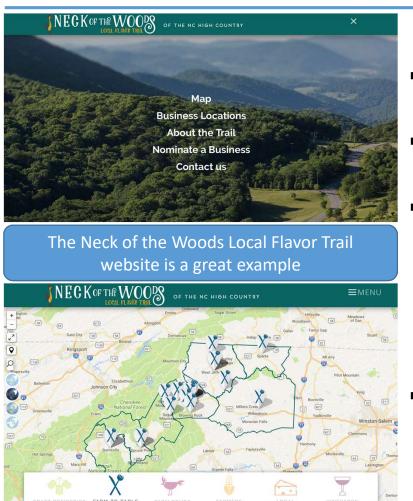
"We accommodate whatever group is coming in. If they are interested in learning about something in particular, we bring in the right volunteers and make it happen."

-Karen Willis Amspacher, Executive Director of The Core Sound Museum





Best-in-class-website will differentiate North Carolina and serve as story-telling platform and information hub for sites and visitors



- Site list with details on each site
- Map and "Plan Your Trip" feature
- "Oyster Story" section featuring interactive and media content such as:
 - Profiles of oyster producers
 - Educational features on triploids, merroir, and ecosystem services
- Information section for participating and prospective sites





Gamification links sites by encouraging visitors to see more and be more engaged on the Trail in pursuit of game objectives

Oyster Trail Passport Game Rules¹

- Enjoy an oyster dish at least 3 Crystal Coast
 Region food and beverage establishments
- Visit 1 Crystal Coast Region historical site
- Visit the Pine Knoll Shores Aquarium
- Participate in 1 outdoor/natural site activity
- Visit the Core Sound Museum with your stamps to claim a prize:

Carolina Shuckers knife



Be featured on our social media



Crystal Coast Region Site List:



Food and Beverage
Table 9 Seafood Restaurant
Seaside Galley
Sanitary Fish Market

Southern Salt Seafood Company Shuckin' Shack Oyster Bar

T&W Oyster Bar

Cultural/Historical Sites

North Carolina Maritime Museum Pine Knoll Shores Aquarium Cape Lookout Lighthouse Fort Macon State Park

Outdoor/Natural Sites

Beaufort Paddle Down East Kayaks Sandbar Oyster Company Roosevelt Natural Area Cape Lookout National Seashore





Trail Site

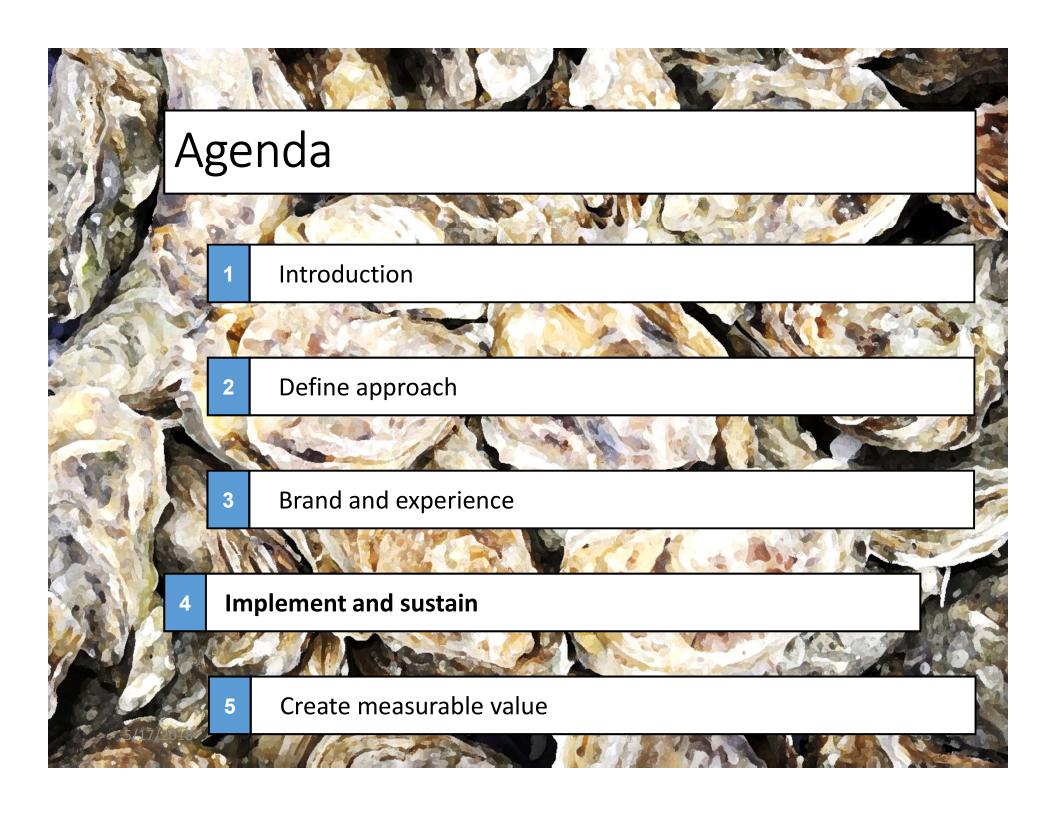
OYSTER TRAIL

A storefront logo will connect Oyster Trail sites for visitors and can also link visitor Trail experiences to the oysters themselves

Oyster	Síze	Flavor	Origin
Hama-Hama	Regular/XL	Sweet, melon	Washington
Paramount	Regular	Light briny	Virginia
Bay Island	Small	Creamy and Sweet	North Carolina (HINDERNING)
Eagle Rock	XL	Medium Briny	Virginia
Yanakama	Regular	Metallic, Sweet	Brítísh Columbía
Orient Point	Regular	Light Briny	Long Island
Olympía	Small	Tangy	Washington
Island Creek	Regular	Medium Briny	Massachusetts
Level Point	Regular	Very Briny	North Carolina RIBINGARINI
Kíng's Pass	Regular	Sweet	Virginia
Carolina Cove	Regular/XL	Sweet	North Carolina (INCHINIC) (INCHIN



*Sample of what a logo might look like







North Carolina Oyster Trail launch implemented through a sixphase plan

Convene and fund

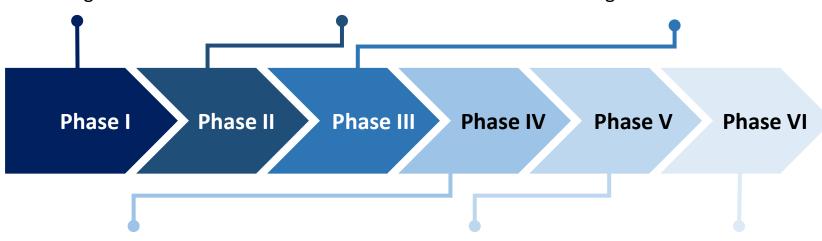
- Assemble coalition of lead agency and collaborators
- Obtain project seed funding

Staff and begin website

- Fill FTE position
- Contract with web design firm

Establish brand and structure

- Finish website, logo, and brand materials
- Begin onboarding initial region



Initiate mass messaging

- Plan grand opening
- Begin mass messaging campaign

Launch

Official opening of trail

Grow and evolve

- Expand trail to new region(s)
- Generate revenue





Phase 1 (Year 1): Obtain seed funding

I		
ï		

The Trail will have little revenue in Year 1

II

Seed funding should fund the Trail for at least one year

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Seed funding should cover one-time startup costs *and* ongoing operational expenses during startup period

Phase

 Possible costs vary significantly depending on aggressiveness of marketing approach

IV

Year 1 costs are estimated to be between \$106K and \$895K

VI

 See appendix for complete breakdown of each expense line item

North Carolina Startup Expenses		
	Min	Max
Website		
Design and building	\$3,683	\$18,333
Hosting ¹	43	92
Content creation ²	908	1,722
Maintenance ¹	218	583
Total Website Expense	\$4,852	\$20,730
Trademark		
Design	\$230	\$693
Registration	258	367
Total Trademark Expense	\$488	\$1,060
Advertising		
Web (SEO)	\$1,833	\$9,167
Print		
Brochure ³	253	1,033
Newspaper ⁴	13,176	334,482
Magazine	21,633	320,000
National Radio ⁵	300	50,000
Total Advertising Expense	\$37,196	\$714,682
Miscellaneous		
Marketing Project Manager	\$36,000	\$112,000
Hub displays/exhibits	26,667	46,667
Total Miscellaneous Expense	\$62,667	\$158,667
Total Startup Expenses	\$105,203	\$895,139

Sources: See appendix 3.1

¹Annual expense

²Assumes approximately 5-7 pages of content

Range based on 1,000 to 10,000 brochures

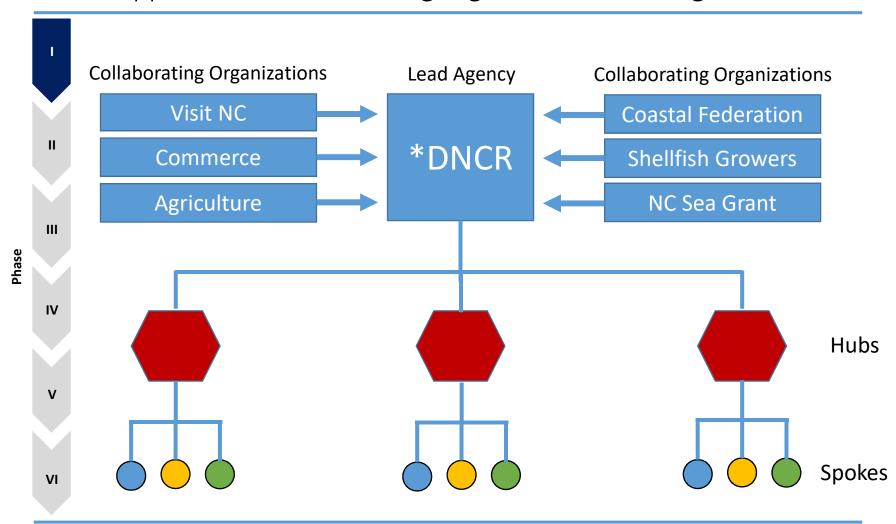
⁴Range based on ad size (B&W strip up to full page color)

⁵Assumes 100 ad plays





Phase 1 (continued): The Trail should be run by one lead agency with support from collaborating organizations and regional hubs







Phase 1 (continued): Lead agency and collaborating organizations will be jointly responsible managing and marketing the Trail

	1	Lead Agency Responsibilities	Benefits of Reporting
Phase		 Actively manage and market the trail 	Accountability
		 Operate budget, track spending, collect fees 	Transparency
		 Maintain quality across sites and NC oyster brand 	 Ability to provide input/oversight
			Annual Report
	IV	 Administer metrics and gauge trail success 	 Previous year activities and
		Collaborating Organization Responsibilities	budget
	v	 Leverage resources and marketing channels 	Coming year activities and budget
		 Provide area-specific expertise 	_
	VI	 Voice concerns and provide feedback 	 Trail visitation and other key metrics





Phase 2 (Year 1): Begin website development and hire a permanent director of the Oyster Trail

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VI

Phase

IV

website launches

Website

Web projects generally require 12 to

project kicks off to the time that the

16 weeks from the time that the

The total website cost ranges

between \$4,800 to \$20,800

Website cost breakdown below:

	Min	Max
Website		
Design and building	\$3,683	\$18,333
Hosting ¹	43	92
Content creation ²	908	1,722
Maintenance ¹	218	583
Total Website Expense	\$4,852	\$20,730

Project Manager

- Marketing Project Manager salary ranges between \$36,0003 to \$112,000
- Project Manager will lead the execution of the Oyster Trail and all promotional activity

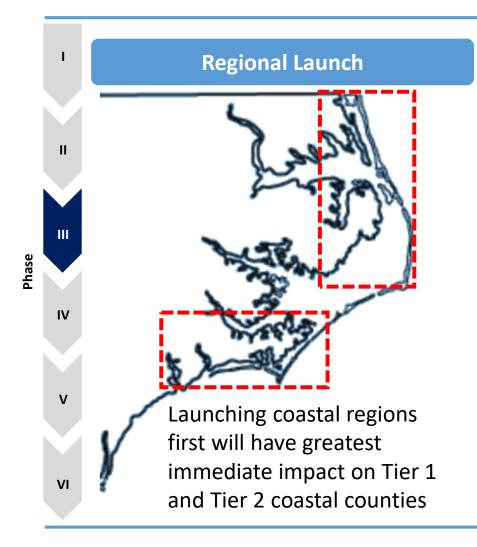
Logo Design

- Finalize logo design
- Trademark design and registration expense ranges between \$488 to \$1,060





Phase 3 (Year 1): Commence onboarding of initial region



Hub Displays and Exhibits

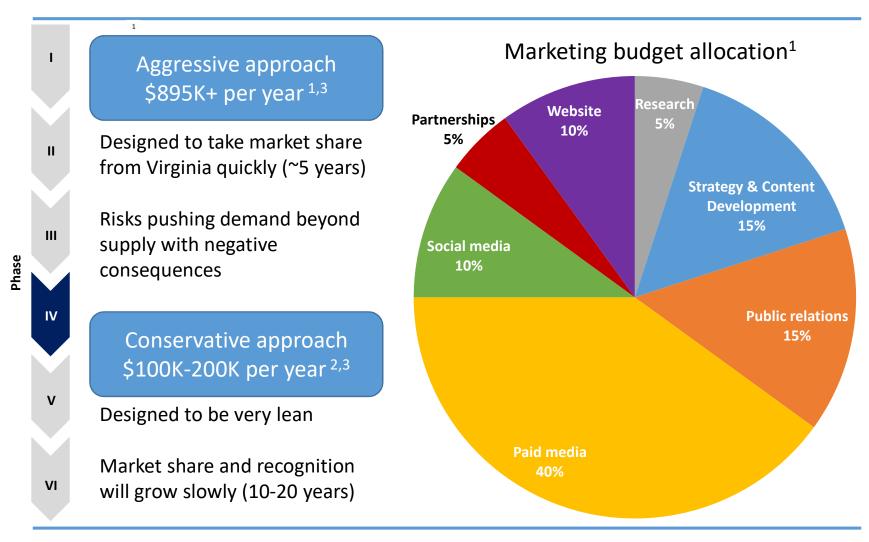
- Costs range between \$26,000 and \$46,000
- Professional companies assemble all display materials in 6 to 12 weeks







Phase 4 (Year 1): Initiate marketing campaign







Phase 5 (Year 1): Launch the Trail with a grand opening celebration

Grand Opening Celebration

Hold on a high-visitation weekend

II

Scheduled to coincide with local

festivals, like the Crystal Coast
Oyster Festival and should include
additional events (e.g. 5K, cultch

planting, etc.)

Phase

IV

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v

VI

- "Celebrity" presence at the grand opening to attract publicity and support
 - Governor Cooper
 - NC celebrity chefs

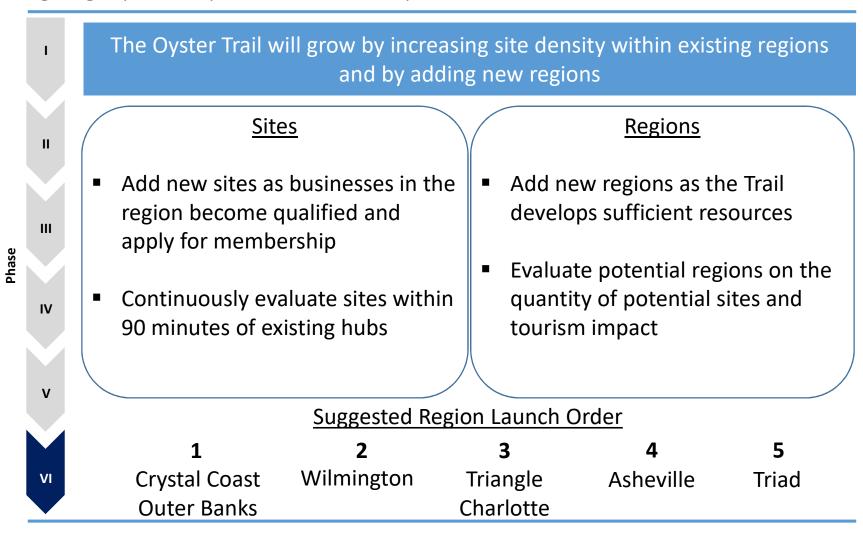
November 9, 2015 - Virginia Governor Terry McAuliffe at Virginia Oyster Trail launch







Phase 6 (Year 2 and beyond): Continuously add sites and evaluate geographic expansion annually







Annual expenses break down into labor, advertising, start-up and web design

Projected Trail Budget



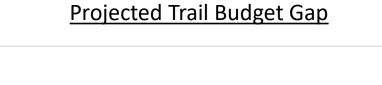
5/17/2018 See appendix <u>3.2</u>

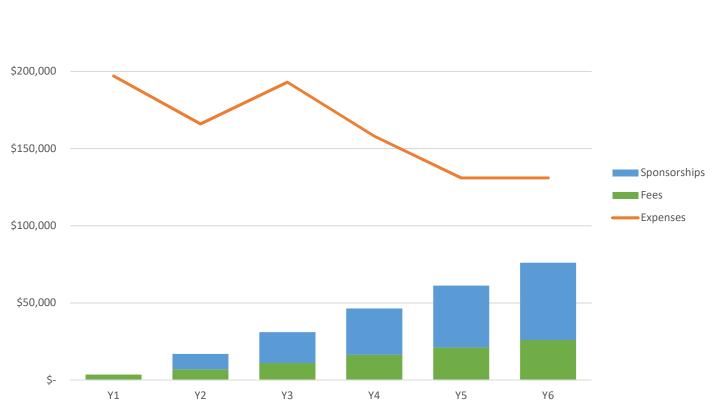


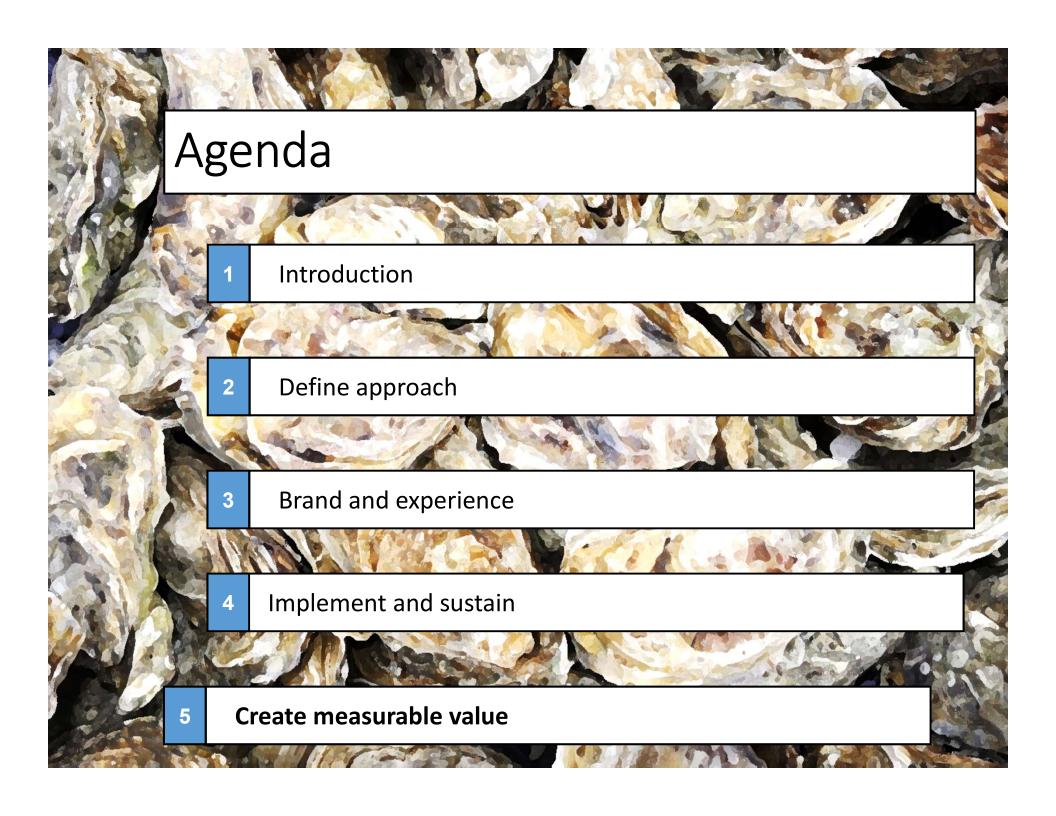
\$250,000



Funding is needed to fill budget gaps in the Trail's early years





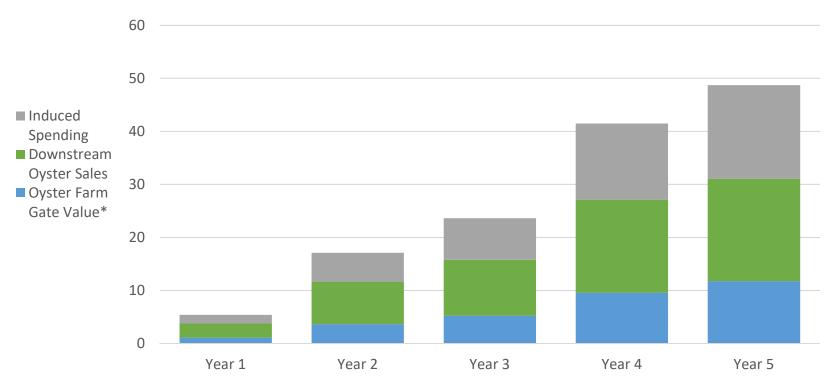






\$136 million in cumulative economic impact from oyster sales will be realized during the first five years

5-year Projected Economic Impact \$ millions



*Using current Sales of \$1.1 million for year 1

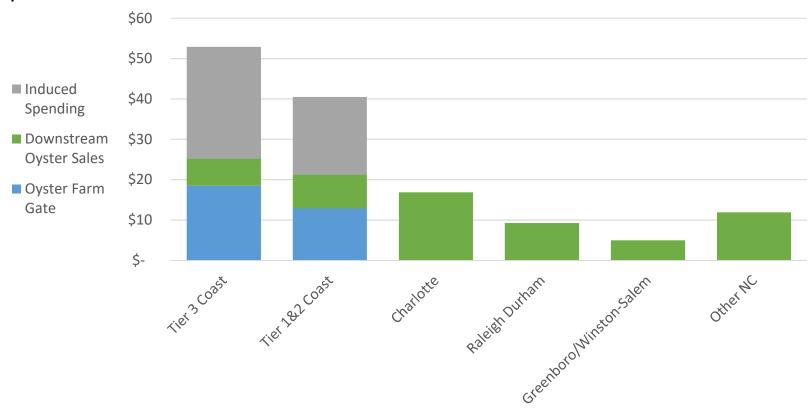
5/17/2018 Source: See Appendices <u>4.1</u>, <u>4.3</u> – <u>4.5</u>





The majority of the economic impact from the trail will happen in coastal counties

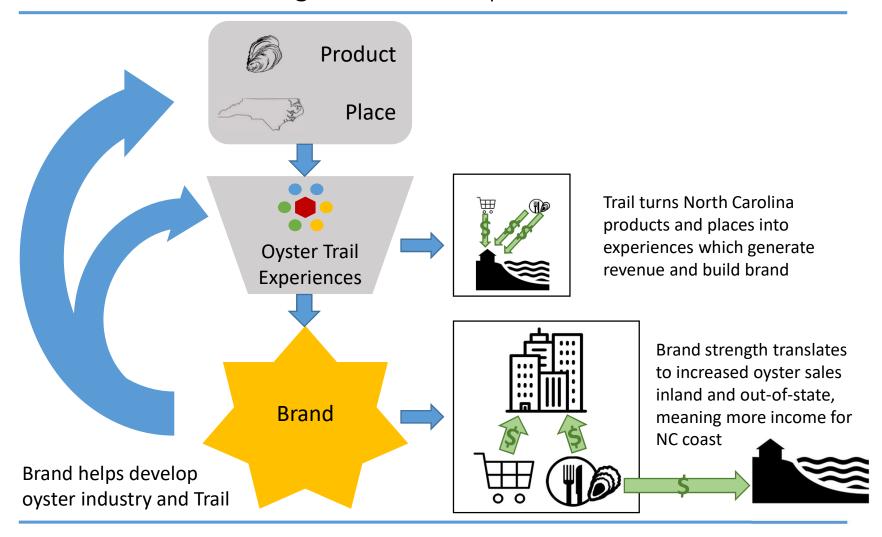
Projected cumulative economic impact of Oyster Trail over 5 years \$ millions







Building a North Carolina Oyster Trail, brand, and industry are related and reinforcing activities that provide economic value

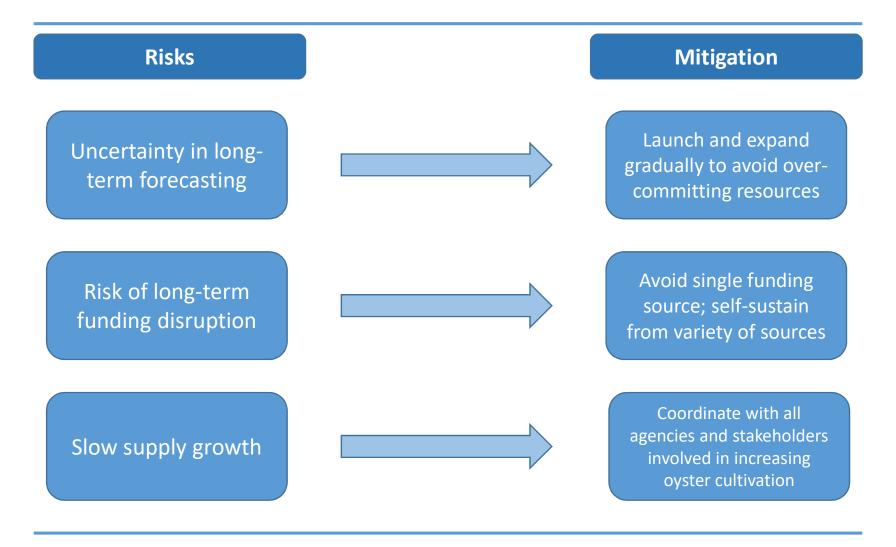


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Mitigation of risk factors will help ensure long-term success









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Appendix 1.1: History of Oysters in NC

- In the mid-1800s, NC was an oyster mecca as the state grew, so did the demand for the mollusks
 - The state began legislating the harvest of oysters in 1822
 - In 1858, a new law awarded fishing rights to citizens who enclosed, seeded and harvested estuarine ground for oyster farming
 - Oystermen created 52,000 acres of private oyster gardens in the three decades that followed
- By the late 1880s, oysters from North Carolina were being harvested at unprecedented rates and shipped by boxcar to San Francisco and New York
 - Maryland and Virginia had greatly depleted the natural oyster beds in the Chesapeake Bay, causing out-of-state canneries to open oyster houses in North Carolina (and thus irresponsible harvesting practices, such as illegal dredging)
 - In 1891, legislature declared "war" on out-of-state harvesters who collected oysters with motorized dredges leading to a period now called the "Oyster War of 1891"
- Returning to hand-harvest-only management and limited dredging resulted in declines in oyster harvest and the closing of many of the canneries





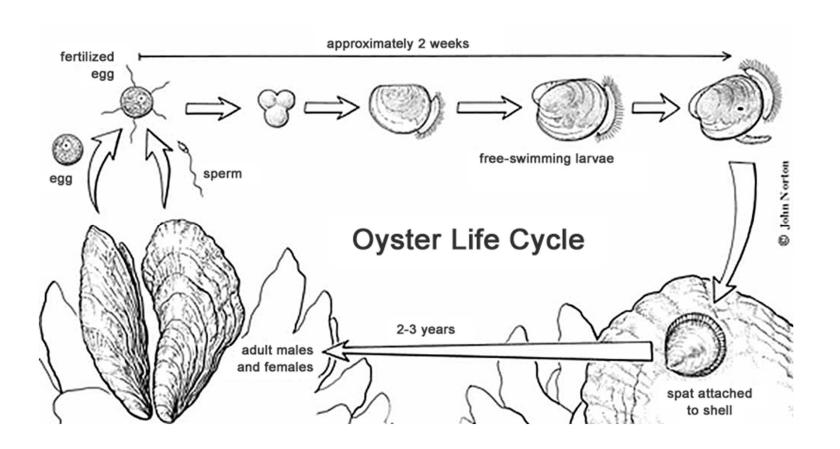
Appendix 1.1: History of Oysters in NC (cont'd)

- Oyster landings reached the highest level on record in 1902 at 806,363 bushels...
 but have steadily declined since
- In the early twentieth century, the General Assembly passed laws reinstating the commercial dredging season and defining areas for (and limits on) oyster harvesting
- Throughout the twentieth century, oyster landings decreased as harvest limits remained:
 - taking too much shell from the water (over-harvest)
 - natural disasters
 - shellfish diseases
 - unsuitable water quality
- As a result, North Carolina has lagged behind Virginia and Maryland for oyster production





Appendix 1.2: Oyster Lifecycle – An Illustration







Appendix 1.3: Diploids vs. Triploids

- Natural oysters are diploids—each of their cells contains two sets of chromosomes, one from each parent
- Most farm-raised oysters are triploids, meaning that they have three chromosomes
 - Invented by Standish Allen, currently the director of the Aquaculture Genetics and Breeding Technology Center at William & Mary's <u>Virginia Institute for Marine Science</u>
- The uneven number of chromosomes results in a mostly infertile oyster that grows bigger and faster than natural oysters, because it doesn't waste energy producing eggs and sperm). Benefits:
 - Can be harvested earlier
 - Less susceptible to disease
 - Can be marketed year-round, including "r-less" summer months
- Even though most oysters produced today are still diploids, the bulk of them are shelled and incorporated into canned / processed oyster products





Appendix 1.4: Cultivation

- Oysters naturally grow in estuarine (partially enclosed coastal) bodies of brackish water (less saline than salt water). When farmed, the temperature and salinity of the water are controlled / monitored, so as to induce spawning and fertilization (if diploids) or rapid maturation (if triploids).
- Once oysters reach seed or spat stage (often in a hatchery), three methods of cultivation are commonly used:
 - 1. Distributed over existing oyster beds and left to mature naturally. Such oysters are then collected using the methods for fishing wild oysters, such as dredging.
 - 2. Put in racks, bags, or cages (or glued in threes to vertical ropes) which are held above the bottom. Oysters may be harvested by lifting the bags or racks to the surface and removing mature oysters, or simply retrieving the larger oysters when the enclosure is exposed at low tide.
 - The latter method may avoid losses to some predators, but is more expensive.
 - 3. Placed in a cultch within an artificial maturation tank. The maturation tank may be fed with water that has been especially prepared for the purpose of accelerating the growth rate of the oysters.
 - This method = least susceptible to predators and poaching, but is the most expensive to build and to operate.





Appendix 1.4: Cultivation – Pictures

Distributed over existing oyster beds



Placed in a cultch within an artificial maturation tank



Put in racks, bags, or cages (or glued in

threes to vertical ropes









Appendix 1.5: Oyster Mariculture and Restoration

Cultch Planting

- Deposits of oyster shell, marine limestone and/or clam shell — collectively called "cultch" — in shellfish waters are colonized by wild oyster spat
- Cultch planting sites open to public harvest once oysters reach legal harvest size

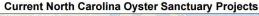
Oyster Farming

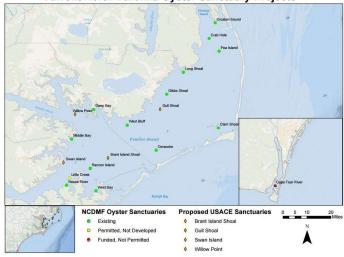
- More oysters in NC waters = increased water filtration
- Additional habitat for other fish and sea creatures and plants (nitrogen sequestration)
- Spur local economy and support year-round triploid cultivation

Sanctuaries

- Constructed throughout NC's sounds and designed to improve wild stock
- Serve as marine-protected areas that are typically closed to oyster harvest, but open to hook and line fishing





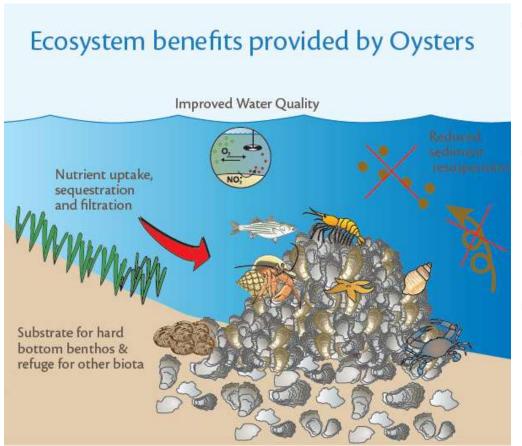


5/17/2018 Source: ncoysters.org





Appendix 1.6: Ecosystem Services of Oysters



- Oysters filter organic and inorganic particles from the water, positively impacting other species in their mariculture ecosystem.
- Oysters can selectively choose and feed on microscopic algae, removing algal biomass from the ocean and improving overall water quality.
- In wild reefs, the presence of oyster shells creates a hard bottom substrate that provides habitat, shelter and spawning beds for other bay organisms

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Appendix 1.7: The NC Difference: "To eat an oyster is to taste a place"

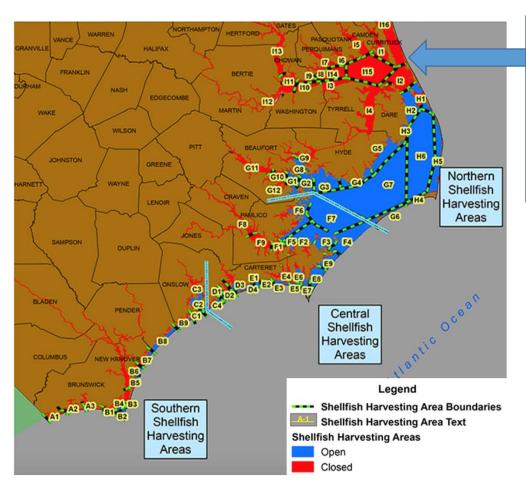
- Crassotrea viriginica, or the Eastern / Atlantic
 Oyster, is North Carolina's native species
 - Tend to be brinier than the other four species, with a crisp texture, clean flavor, mineral accent and savory finish
- NC's northern coastal inlets creates a unique flavor profile different from other Eastern oysters:
 - The brackish waters found in Stump Sound and Topsail Sound loiter and drift, and are free from the turbulence of deeper currents
 - This allows oysters to grow long and leggy, and the higher salinity in the water lends to a saltier taste
- Other popular NC oysters hail from Lockswoods Folly, Masonboro Sound, Shallotte River and Newport River







Appendix 1.8: Current oyster leases and expansion limitations



Note that Albermarle Sound is closed to oyster production. The salinity in Albermarle is too low for oysters. This limits the impact of oyster production on many Tier 1 and Tier 2 counties located in this region.

As of February 2014, there were 172 shellfish leases encompassing 1179 acres and 50 shellfish franchises Fourteen shellfish water column operations existed within 37 acres of leased or franchised bottom. - NCDENR

Restrictions include ensuring the lease is multi-use, paid for, and produces a minimum number of oysters





Appendix 1.9: Stakeholders, experts, and collaborators list (not exhaustive)

State agencies

- Department of Natural and Cultural Resources
- Department of Agriculture
- Department of Commerce
- Department of Environmental Quality
- Division of Marine Fisheries

Fishing/shellfish industry

- North Carolina oyster harvesters
- North Carolina oyster growers
- Commercial fishermen
- North Carolina Shellfish Growers Association
- Harvesters/growers of other shellfish
- Finfish aquaculture growers

Communities

- Rural coastal communities and organizations
- Coastal property owners, boaters, and hunters

Business and Tourism

- Lodging and accommodation providers
- NCRLA
- North Carolina food and beverage establishments
- Food distributors
- Tour operators
- Visit NC
- Local tourism offices
- Local chambers of commerce

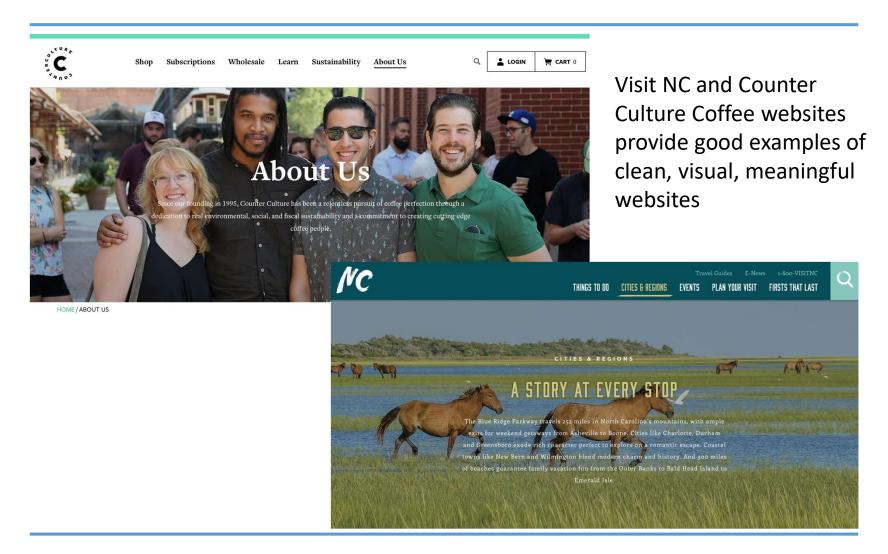
Research and Conservation

- North Carolina Coastal Federation
- NC Sea Grant
- UNC-CH Institute of Marine Sciences





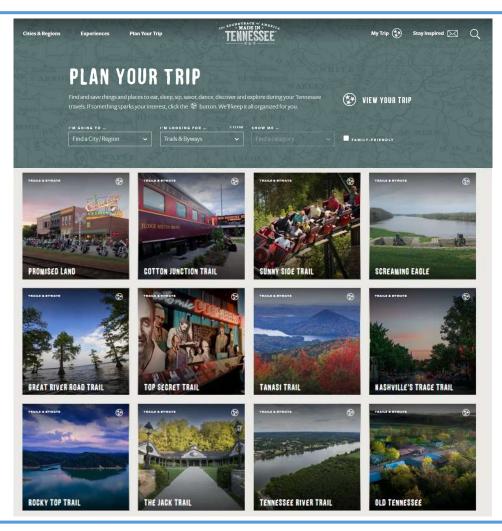
Appendix 2.1: Websites to emulate







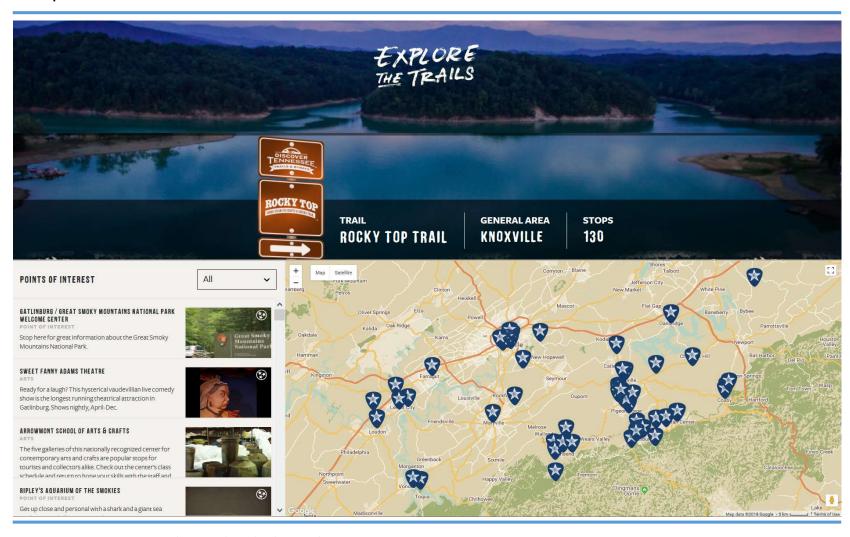
Appendix 2.1: Discover Tennessee Trails and Byways site—links to many Tennessee visitor trails







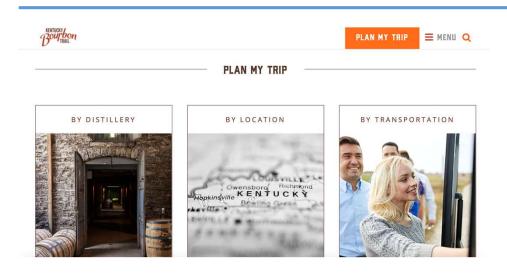
Appendix 2.1: Discover Tennessee Trails and Byways site—Rocky Top Trail







Appendix 2.1: The Kentucky Bourbon Trail is a great example for potential website sections



The Kentucky Bourbon Trail has numerous maps, a 'plan your visit' page, plentiful information of the site locations including media content, and an about section with educational, storytelling information

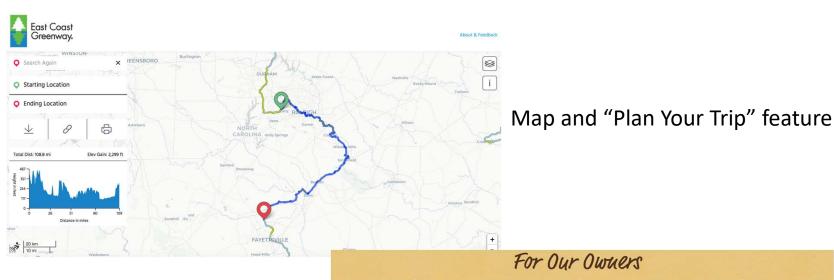




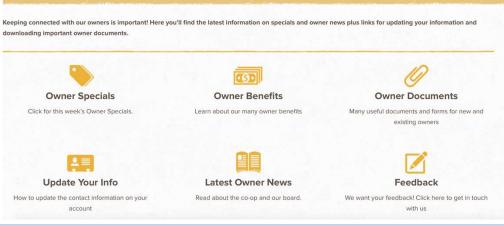




Appendix 2.1: Other examples for potential website sections



Information section for participating and prospective sites – Weaver Street Market







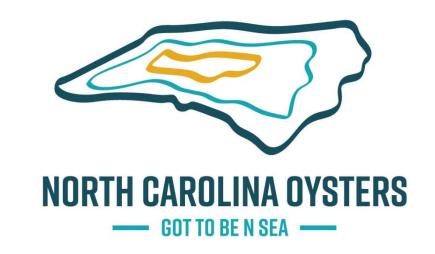
Appendix 2.2: Keep in mind key success factors to get the most out of the website:

- Fast Loading -- No one wants to wait (and wait and wait) for your site to load. Design sites with prompt loading times for all users on all devices (even the ones with slower Internet connections). You can use Pingdom or Pagespeed Insights by Google to check your website speed and see how you can improve.
- Mobile Ready -- Virtually everyone uses smart devices on a daily basis.
 Create an engaging, mobile-friendly design that your audience can access whenever they want, wherever they roam.
- **Tracking Enabled** -- Analytics matter it's the best way to determine that your website is actually doing its job. The final design should include functionality to gauge key indicators such as traffic, goals, and conversions.
- Visual appeal Tasteful imagery and a creative layout can reveal quality in the NC oyster brand and entice user interest.
- Frequently updated





Appendix 2.3: The NC Oysters logo should be simple and differentiated



A good logo is:

- Easily recognizable
 Versatile
- Memorable
- Timeless
- Appropriate

Meaningful

Other logos lack color/creativity or are difficult to see/read:











Appendix 2.4: Potential North Carolina Oysters Logos









Appendix 2.5: Gamification 101

- "Gamification" is the process of taking something that already exists a website, an enterprise application, an online community – and integrating game mechanics into it to motivate participation, engagement, and loyalty.
- In the last decade, gamification has grown rapidly and spread throughout almost every field, including education, manufacturing, retail, food services and healthcare. The global gamification market is expected to reach \$5.5 billion in 2018 to over \$11 billion by 2020
- For **consumers**, gamification allows for better engagement with purchases, increases value creation, enhances services, and builds a relationship between buyer and seller. For **businesses**, gamification incentives consumers to spend more.

GAMIFICATION

87% of retailers plan to use gamification as a way to increase consumer engagement within the next five years.





Appendix 2.5: Additional approaches to gamification







Appendix 2.6: Mobile app

Developing a North Carolina Oyster Trail mobile app could provide many advantages:

- Trail visitors could take an easy-to-use mobile version of the Oyster Trail website, along with its mapping features, Trail site information, and other features with them as they visit Trail sites
- Printed promotional materials like Trail passports could be digital, thus avoiding printing costs
- Notifications based on geographic location could be used to alert visitors when they are near trail sites
 - This could be helpful in "cross-pollinating" inland and coastal sites—if an inland resident downloads the app to visit oyster trail sites in their city and then visits the coast, or vice versa
 - Consider *History Here* app as an example of this
- It could also be integrated with social media to help visitors share their photos and experiences on the trail to Facebook, Instagram, and others

Please note that no funding for app development is included in our budget estimates





Appendix 2.6: Discover Tennessee Trails and Byways app

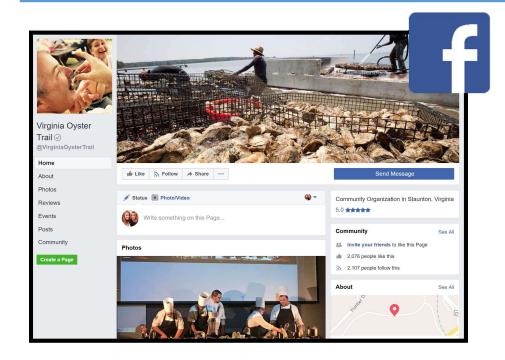








Appendix 2.7: Social media





Tapping into social media can organically help grow NC Oyster Trail efforts while providing a platform for consumers to engage with the NC Oysters brand.

- 61% of consumers say reviews on social media influence their buying decisions
- 68% of people look to Facebook when purchasing products
- 80% of Instagram users follow a business on the platform





Appendix 3.1: Cost estimates for Year 1

	e Expense	
Design and building Source	Min	Max
ATILUS, LLC	\$3,500	\$30,000
Lifewire	\$2,050	\$10,000
Best Website Builder Reviews	\$5,500	\$15,000
Mean	\$3,683	\$13,000
Median	\$3,500	\$15,000
Hosting		
Source	Min	Max
HostGator	\$36	\$132
1&1	\$12	\$96
GoDaddy	\$12	\$96
InMotion	\$36	\$96
Hostwinds	\$54	\$54
Bluehost	\$35	\$96
HostMonster	\$83	\$83
JustHost	\$72	\$84
Mean	\$43	\$92
Median	\$36	\$96
Content creation		
Source	Min	Max
Content Launch	\$475	\$665
The Content Factory	\$2,000	\$4,000
Best Website Builder Reviews	\$250	\$500
Mean	\$908	\$1,722
Median	\$475	\$665
Maintenance		
Source	Min	Max
Maintaingo	\$35	\$300
WebpageFX	\$119	\$449
Best Website Builder Reviews	\$500	\$1,000
Mean	\$218	\$583
Median	\$119	\$449

Ad	vertising Expens	e
Web (SEO)		
Source	Min	Max
RankPay	\$1,000	\$7,500
Search Engine Land	\$500	\$10,000
WebpageFX	\$4,000	\$10,000
Mean	\$1,833	\$9,167
Median	\$1,000	\$10,000
Brochure		
Source	Min	Max
Print Place	\$210	\$800
VistaPrint	\$350	\$1,400
UPrinting	\$200	\$900
Mean	\$253	\$1,033
Median	\$210	\$900
Newspaper		
Source	Min	Max
Washington Post	\$20,428	\$163,422
USA Today	\$16,900	\$485,200
WSJ	\$2,200	\$354,823
Mean	\$13,176	\$334,482
Median	\$16,900	\$354,823
Magazine		
Source	Min	Max
Entrepreneur Media	\$500	\$500,000
WebpageFX	\$500	\$250,000
Inc. Media Kit	\$63,900	\$210,000
Mean	\$21,633	\$320,000
Median	\$500	\$250,000
National Radio		
Source	Min	Max
WebpageFX	\$300	\$50,000
GoArticles.com	\$300	\$50,000
Mean	\$300	\$50,000
Median	\$300	\$50,000

Tradema	rk Expense	
Design	· · · · ·	
Source	Min	Ma
Deluxe Enterprise Operations	\$200	\$50
99designs	\$300	\$1,30
Thumbtack	\$190	\$28
Mean	\$230	\$69
Median	\$200	\$50
Registration		
Source	Min	Ma
LegalZoom	\$275	\$37
USPTO	\$225	\$40
WSJ	\$275	\$32
Mean	\$258	\$36
	Y-00	700
Median	\$275	•
		\$37
Median Miscellane Marketing Project Manager	\$275	\$37
Miscellane	\$275	\$37 e
Miscellane	\$275 eous Expens	\$37 e Ma
Miscellane Marketing Project Manager Source	\$275 eous Expens	\$37 e Ma \$118,00
Miscellane Marketing Project Manager Source Glassdoor	\$275 eous Expens	\$37 e Ma \$118,00 \$92,00
Miscellane Marketing Project Manager Source Glassdoor Payscale Indeed	\$275 eous Expens Min \$54,000 \$37,000	\$377 B Ma \$118,00 \$92,00 \$126,00
Miscellane Marketing Project Manager Source Glassdoor Payscale	\$275 eous Expens Min \$54,000 \$37,000 \$17,000	Ma \$118,00 \$92,00 \$126,00 \$112,00
Marketing Project Manager Source Glassdoor Payscale Indeed Mean Median	\$275 Seous Expense Min \$54,000 \$37,000 \$17,000 \$36,000	Ma \$118,00 \$92,00 \$126,00 \$112,00
Miscellane Marketing Project Manager Source Glassdoor Payscale Indeed Mean Median Hub displays/exhibits	\$275 Seous Expense Min \$54,000 \$37,000 \$17,000 \$36,000	\$37 Ma \$118,00 \$92,00 \$126,00 \$112,00 \$118,00
Miscellane Marketing Project Manager Source Glassdoor Payscale Indeed Mean Median Hub displays/exhibits Source	Min \$54,000 \$37,000 \$37,000 \$37,000	\$37 Ma \$118,00 \$92,00 \$126,00 \$112,00 \$118,00
Miscellane Marketing Project Manager Source Glassdoor Payscale Indeed Mean Median Hub displays/exhibits	\$275 Min \$54,000 \$37,000 \$17,000 \$36,000 \$37,000	Ma \$118,00 \$92,00 \$126,00 \$112,00 \$118,00
Miscellane Marketing Project Manager Source Glassdoor Payscale Indeed Mean Median Hub displays/exhibits Source 2020 E&E Exhibit Solutions	\$275 Min \$54,000 \$37,000 \$17,000 \$36,000 \$37,000	\$37
Marketing Project Manager Source Glassdoor Payscale Indeed Mean Median Hub displays/exhibits Source 2020 E&E Exhibit Solutions ProExhibits HQ	\$275 Min \$54,000 \$37,000 \$17,000 \$36,000 \$37,000 Min \$40,000 \$30,000	Ma \$118,00 \$92,00 \$126,00 \$112,00 \$118,00 Ma \$60,00 \$40,00





Appendix 3.2: Trail Budget Breakdown

	Y1	Y2	Y3	Y4	Y5	Y6
Web	\$ 5,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000
Advertising	\$ 38,000	\$ 38,000	\$ 38,000	\$ 30,000	\$ 30,000	\$ 30,000
Labor	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Misc. Start-Up	\$ 54,000	\$ 27,000	\$ 54,000	\$ 27,000	\$ -	\$ -
Expenses	\$ 197,000	\$ 166,000	\$ 193,000	\$ 158,000	\$ 131,000	\$ 131,000
External Funding Requirement	\$ 191,000	\$ 145,000	\$ 155,500	102,000	\$ 57,000	\$ 39,000





Appendix 3.3: Trail Revenues

	Y1	Y2	Y3	Y4	Y5	Y6
Regions (Hubs)	2	3	5	6	6	6
Sites	30	50	80	120	160	200
New Site Fee	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50
Site Fee	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200
Sponsorships	\$ -	\$ 10,000	\$ 20,000	\$ 30,000	\$ 40,000	\$ 50,000
Fees	\$ 6,000	\$ 11,000	\$ 17,500	\$ 26,000	\$ 34,000	\$ 42,000
Trail Revenue	\$ 6,000	\$ 21,000	\$ 37,500	\$ 56,000	\$ 74,000	\$ 92,000





Appendix 4.1: Oyster sales potential by region

Region where sold	Number of Restaurants ¹	Percent that serve or might serve oysters ²	Avg restaurant price ³	Tier 1 and Tier 2 Coastal Multiple ⁴	Percent share of economic benefit to Tier 1 and Tier 2 Coast ⁵	North Carolina Multiple ⁶	Percent share of economic benefit to North Carolina ⁷
Triangle	2630	9%	\$ 2.12	71.2	11%	594.6	18%
Triad	1498	8%	\$ 1.50	38.2	6%	244.5	7%
Charlotte	1914	21%	\$ 2.36	129.6	19%	1179.5	36%
Tier 3 Coastal	1018	16%	\$ 2.16	51.9	8%	439.8	13%
Tier 1&2 Coastal	1052	19%	\$ 1.46	288.3	43%	406.5	12%
All Other	8100	4%	\$ 1.00	91.4	14%	441.8	13%

Column	Source/Notes Source/Notes
1	Simply Analytics
2	Based on sample of 20-50 restaurant menus from each region, lower bound of 80% or 85% confidence interval, depending on sample size
3	Based on sample of 20-50 restaurant menus from each region, lower bound of 80% or 85% confidence interval, depending on sample size
4	Unitless value used to compare impact on Tier 1 and Tier 2 economies, driven only by farm gate value and induced/indirect spending unless sale region is Tier 1 or Tier 2 coast, based on 59% of oyster producers being located in Tier 1 or Tier 2 counties (data from NC Shellfish Growers Association)
5	Tier 1 and Tier 2 Coastal multiple converted to percentage of total
6	Unitless value used to compare impact on total North Carolina economy
7	North Carolina multiple converted to percentage of total

5/17/2018 79





Appendix 4.2: Oyster economic impact value chain

Label	Value	Source								
Average VA unit farm gate value for single- or spat-on-shell oysters (2016)		Virginia Shellfish Aquaculture Situation and Outlook, Virginia Institute of Marine Science, 2017								
Bushels of VA spat-on-shell (2016)		Virginia Shellfish Aquaculture Situation and Outlook, Virginia Institute of Marine Science, 2017								
Bushels of VA single-shell cultivated oysters	325,000	Calculated Value								
Bushels of VA cultivated oysters	371,000	Virginia oyster harvest drops by 19,000 bushels in 2015-16, Daily Press, 12/23/2016								
Average NC Price paid to distributor for non-half-shell oysters	\$0.47	Restaurant Survey								
Average NC Price paid to distributor for half-shell oysters	\$0.61	Restaurant Survey								
Ratio of half-shell to non-half-shell oyster distributor prices	1.30	Calculated Value								
Weighted average ratio where 1 = 100% spat-on-shell	1.26	Calculated Value								
Average NC price paid to producer for non-half-shell oysters	\$0.35	Calculated Value								
Average NC price paid to producer for half-shell oysters	\$0.42	Calculated Value								
NC cultivated oyster value (2016)	\$1,100,000	Comments from NC Sea Grant on projecting 10-year oyster farming industry metrics, NC Sea Grant, 9/7/2017								
NC oyster wild harvest value (2017)	\$4,500,000	Calculated value								
NC total oyster production value (2017)	\$5,600,000	NC Department of Marine Fisheries 2017 Annual Fisheries Bulletin								
NC cultivated oyster units	2,619,048	Calculated value, assumes all cultivated oysters are sold on half shell								
NC wild harvest oyster units	12,857,143	Calculated value, assumes no wild harvest oysters are sold on half shell								
Total NC oysters produced	15,476,190	Calculated value								
Weighted average producer price for NC oyster		Calculated value, attempts to account for price and production volume differences in half-shell vs. non-half-shell oysters								
All calculated values are estimates based on assumptions and a over time.	All calculated values are estimates based on assumptions and available data. Actual values may differ. Actual prices would likely increase									





Appendix 4.3: Virginia Oyster Industry Growth

Year	Farmgate (millions)	% growth
2005	0.8	
2006	3.1	288%
2007	4.8	55%
2008	9.8	104%
2009	12.6	29%
2010	16.9	34%
2011	23.3	38%
2012	28.1	21%
2013	33.7	20%
2014	40.5	20%

Source: VirginiaOysterTrail.com





Appendix 4.4: Sensitivity Analysis of cultivated oyster sales growth—50% of Virginia rate (low)

Year	Farm Gate Value	YoY Growth	Downstream Oyster Sales (Total)	% of Oysters Sold Out of State	NC Downstream Oyster Sales	Induced and Indirect Spending
Year 1	\$1,100,000	144%	\$2,933,333	10%	\$2,640,000	\$1,650,000
Year 2	\$2,681,250	27%	\$7,150,000	17%	\$5,918,611	\$4,021,875
Year 3	\$3,416,431	52%	\$9,110,484	24%	\$6,883,477	\$5,124,647
Year 4	\$5,195,823	14%	\$13,855,528	32%	\$9,467,944	\$7,793,734
Year 5	\$5,938,083	17%	\$15,834,889	39%	\$9,676,876	\$8,907,125
Year 6	\$6,951,328	19%	\$18,536,874	46%	\$9,989,315	\$10,426,991
Year 7	\$8,267,555	10%	\$22,046,814	53%	\$10,288,513	\$12,401,333
Year 8	\$9,119,149	10%	\$24,317,731	61%	\$9,591,994	\$13,678,723
Year 9	\$10,031,064	10%	\$26,749,504	68%	\$8,619,285	\$15,046,596
Year 10	\$11,034,170	10%	\$29,424,454	75%	\$7,356,114	\$16,551,255
10-year Totals	\$63,734,854		\$169,959,609		\$80,432,128	\$95,602,280





Appendix 4.4: Sensitivity Analysis of cultivated oyster sales growth—80% of Virginia rate (most likely)

Year	Farm Gate Value	YoY Growth	Downstream Oyster Sales (Total)	% of Oysters Sold Out of State	NC Downstream Oyster Sales	Induced and Indirect Spending
Year 1	\$1,100,000	316%	\$2,933,333	10%	\$2,640,000	\$1,650,000
Year 2	\$4,578,750	60%	\$12,210,000	17%	\$10,107,167	\$6,868,125
Year 3	\$7,340,770	115%	\$19,575,387	24%	\$14,790,292	\$11,011,155
Year 4	\$15,752,069	31%	\$42,005,518	32%	\$28,703,771	\$23,628,104
Year 5	\$20,702,720	38%	\$55,207,252	39%	\$33,737,765	\$31,054,079
Year 6	\$28,474,455	42%	\$75,931,880	46%	\$40,918,846	\$42,711,682
Year 7	\$40,336,003	23%	\$107,562,674	53%	\$50,195,915	\$60,504,004
Year 8	\$49,476,522	22%	\$131,937,392	61%	\$52,041,971	\$74,214,783
Year 9	\$60,361,357	22%	\$160,963,618	68%	\$51,866,055	\$90,542,035
Year 10	\$73,640,855	22%	\$196,375,614	75%	\$49,093,904	\$110,461,283
10-year Totals	\$301,763,502		\$804,702,669		\$334,095,685	\$452,645,252





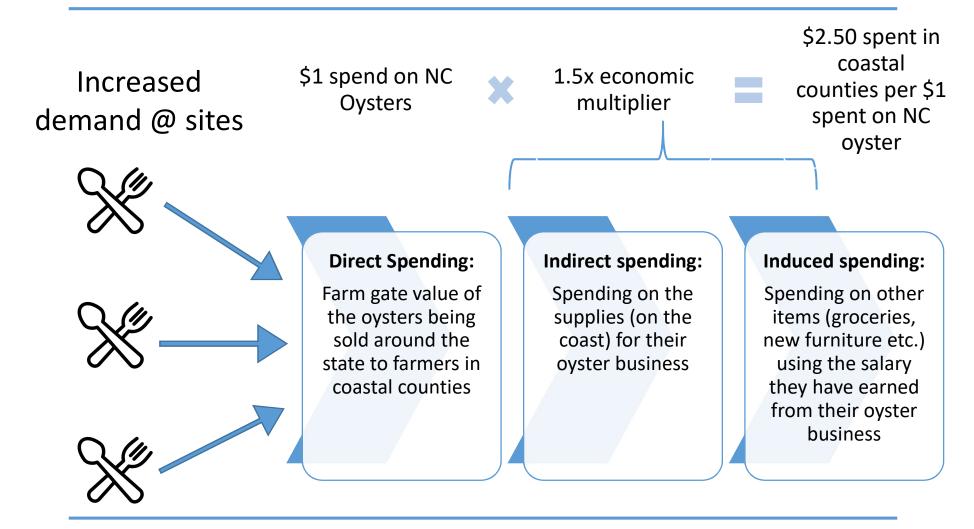
Appendix 4.4: Sensitivity Analysis of cultivated oyster sales growth—110% of Virginia rate (high)

Year	Farm Gate Value	YoY Growth	Downstream Oyster Sales (Total)	% of Oysters Sold Out of State	NC Downstream Oyster Sales	Induced and Indirect Spending
Year 1	\$1,100,000	316%	\$2,933,333	10%	\$2,640,000	\$1,650,000
Year 2	\$4,578,750	60%	\$12,210,000	17%	\$10,107,167	\$6,868,125
Year 3	\$7,340,770	115%	\$19,575,387	24%	\$14,790,292	\$11,011,155
Year 4	\$15,752,069	31%	\$42,005,518	32%	\$28,703,771	\$23,628,104
Year 5	\$20,702,720	38%	\$55,207,252	39%	\$33,737,765	\$31,054,079
Year 6	\$28,474,455	42%	\$75,931,880	46%	\$40,918,846	\$42,711,682
Year 7	\$40,336,003	23%	\$107,562,674	53%	\$50,195,915	\$60,504,004
Year 8	\$49,476,522	22%	\$131,937,392	61%	\$52,041,971	\$74,214,783
Year 9	\$60,361,357	22%	\$160,963,618	68%	\$51,866,055	\$90,542,035
Year 10	\$73,640,855	22%	\$196,375,614	75%	\$49,093,904	\$110,461,283
10-year Totals	\$49,474,309		\$131,931,491		\$89,978,995	\$74,211,464





Appendix 4.5: IMPLAN Model







Appendix 4.6: Measures of incremental success

The best indicator of Oyster Trail performance would be the *incremental* boost the Oyster Trail provides to oyster sales and other spending. "Incremental" in this situation is the *additional* spending that takes place *solely because of* the Oyster Trail and independently of all other factors.

However, this is an exceedingly difficult concept to measure accurately. It would be very difficult and expensive to collect the necessary data, and the activities necessary to collect the data would likely turn visitors away from the Trail and would still be an imperfect estimate. Experts we have interviewed do not believe this is a realistic goal.

More realistic metrics of success that could be implemented more easily would be things like:

- Number of Trail-wide physical visitors
- Average sites visited per visitor
- Website visits

- Social media engagement
- Participation in gamification activities like the passport
- Attendance at Trail-hosted events





Appendix 5.1: Suggested North Carolina Oyster Trail Requirements

General for all trail sites:

- The site features and promotes the North Carolina Oyster.
- The site guarantees North Carolina Oyster authenticity and quality.
- The site celebrates the cultural diversity of the region and reflects positively on its heritage.
- The site is well marked with a business sign
- The site displays a NC Oyster Trail sign.
- The site specifies and maintains regular business hours. The site is visitor friendly, clean, safe and provides adequate restrooms, ample parking, directional signs, icon denoting handicap accessibility, etc.
- The site's parking area is easily accessible by 2-wheel drive vehicles.
- The site promotes, connects and collaborates with other participants on the North Carolina Oyster Trail.
- The site is featured or agrees to be featured on the North Carolina Tourism Corporation website.





Appendix 5.1: Suggested North Carolina Oyster Trail Requirements

Restaurants:

- Feature and promote at least one North Carolina Oyster producer's product while offering different menu preparations (half-shell, roasted, fried, baked, stewed, seasoned, etc.).
- Creates a separate North Carolina Oyster story sheet (akin to a wine list).
- Describes the type of North Carolina Oyster being served, i.e., the region it came from and distinguishing taste characteristics.
- Notes the name of the North Carolina producers or watermen who supplied the oysters.
- Option, yet highly encouraged: Recommend pairings where North Carolina-made beverages, condiments, produce, meats, dairy products are served.
- Wineries and Breweries must either:
 - Participate or host at least 3 NC oyster Events/Year
 - Serves NC Oysters as a menu option at least 2 days a week

Cultural & Historical

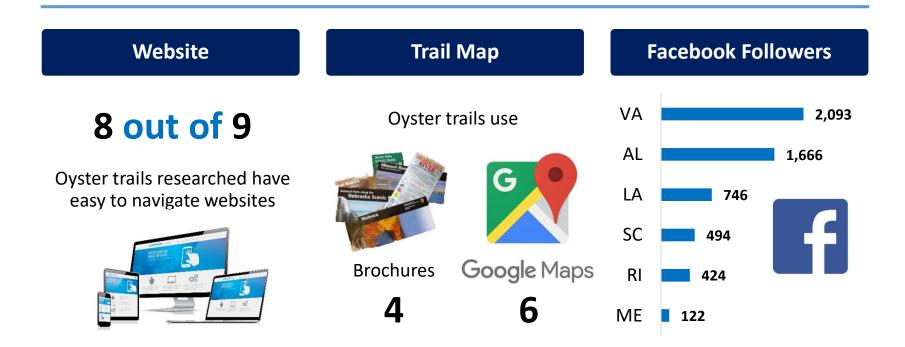
- The site specifically features the North Carolina Oyster's cultural heritage within the region.
- The site features educational activities that are open to the public and provide content specific to the North Carolina Oyster whether artistic, environmental, historical, or business related.
- A point of interest site features recreational and/or event activities that specifically revolve around the North Carolina Oyster.





89

Appendix 6.1: Comparable oyster trails* online presence



*Trails analyzed include Virginia Oyster Trail, The Oyster Trail of Maine, Central Maryland Crab & Oyster Trail, Lowcountry Oyster Trail, The Oyster Trail (Mobile, AL), Panama City Oyster Trail, Louisiana Oyster Trail, Puget Sound Oyster Trail and Rhode Island Oyster Trail





90

Appendix 6.2: Virginia Trail Management Team

35 people

28 organizations

Artisans Center of Virginia	Chesapeake Bay Foundation		
Shellfish Growers of Virginia	VA Dept. of Housing & Community Development		
VA Dept. of Agriculture	VA Tourism Corporation		
VA Marine Products Board	VA Foundation for the Humanities		
Small Business Administration	Small businesses		
Individual watermen	Colleges & schools		





Appendix 6.3: Virginia Trail General Site Criteria

PARTICIPATION DETAILS

General Agri-Artisans Restaurants Lodging Points of Interest Artists Art Retail Venues

GENERAL CRITERIA - ALL VIRGINIA OYSTER TRAIL SITES

- The site features and promotes a genuine Virginia Oyster visitor experience.
- The site focuses and guarantees Virginia Oyster authenticity and quality.
- The site celebrates the cultural diversity of the region and reflects positively on its heritage.
- The site is well marked with a business sign (a VOT trail sign will be provided once qualified).
- The site specifies and maintains regular business hours. Seasonal hours are acceptable. Businesses that are open to the public "by appointment only" or fewer than two days per week will be considered.
- The site is visitor friendly, clean, safe and provides adequate restrooms, ample parking, directional signs, icon denoting handicap accessibility, etc.
- The site's parking area is easily accessible by 2-wheel drive vehicles (4-wheel drive only access areas do not qualify).
- The site promotes, connects and collaborates with other participants on the Virginia Oyster Trail.
- The site is featured or agrees to be featured on the Virginia Tourism Corporation website: Virginia.org (Note: other Virginia Oyster Industry related website participation is recommended however not required for trail participation).

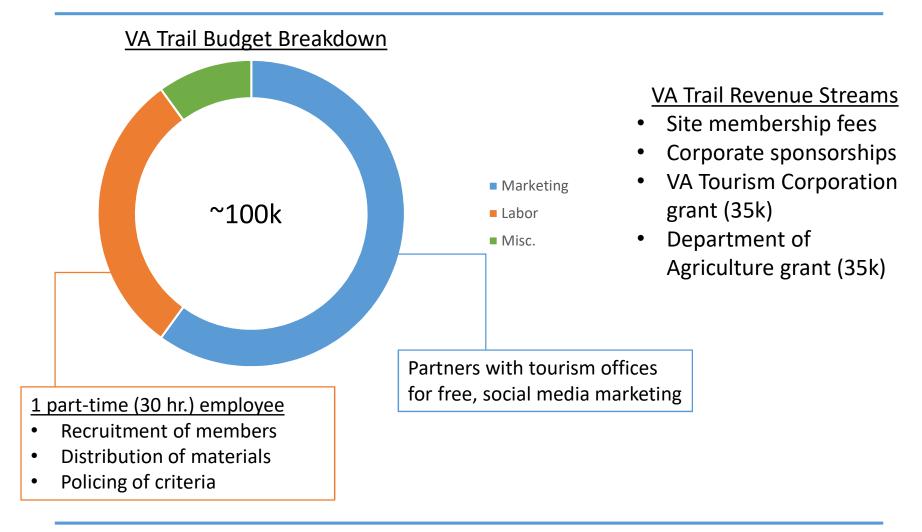
Program Disclaimer: All trail site businesses/owners are solely responsible for complying with zoning regulations, ordinances, health and business licensing requirements as well as any required or discretionary insurance liability coverage in addition to taking steps to reduce/eliminate risk due to negligence.

The enrollment application is subject to review to ensure the business meets participation criteria. Once you are approved, you will receive an official 'welcome' with the login codes and a trail sign will be made available.





Appendix 6.4: Virginia Trail Budget & Revenues







Appendix 7.1: Oyster festivals

- North Carolina Oyster Festival
 - Ocean Isle, NC
 - 38th year
- Crystal Coast Oyster Festival
 - Morehead City, NC
 - 3rd Year
- Outer Banks Seafood Festival
 - Nags Head, NC
- Wrightsville Beach Oyster Festival
 - Wilmington, NC
- Smoky Mountain Oyster and Seafood Festival
 - Asheville, NC

North Carolina already has several oyster festivals, several of which are listed to the left.

Our team believes it would be ill-advised to create an additional, competing oyster festival which could rob these communities of the benefits they should be able to reap for their work in creating these events.

We do believe, however, that existing festivals should be leveraged and included in the Oyster Trail along with other events throughout the year.





- 320 total respondents
- 200 paid respondents
- Administered through Qualtrics
- ~60% from NC, other ~40% from the 10 states with highest number of visitors to NC
- Selected insights and complete questions on following slides





Appendix 8.1: Consumer survey insights

Consumer oyster trail interest by NC regions of interest			
Interested or very interested in visting:	Percent also interested in oyster trail		
RDU	42%		
Charlotte	44%		
Greensboro/Winston-Salem	45%		
Outer Banks	38%		
Central Coast	43%		
Southern Coast	40%		
Western NC	30%		

Consumer willingness to pay (WTP) per half-shell restaurant oyster by NC regions of interest			
Greensboro/Winston-Salem	\$	2.09	
Charlotte	\$	2.01	
RDU	\$	2.00	
Central Coast	\$	1.05	
Southern Coast	\$	0.99	
Western NC	\$	0.88	
Outer Banks	\$	0.86	

Effects of educational messages on consumer WTP					
Average WTP per half- Message shell restaurant oyster with message					
Told about environmental benefits of oysters	\$	1.66	\$	1.84	
Told about oyster benefits to rural communities	\$	1.69	\$	1.65	
Told nothing	\$	1.72			

Interest in Oyster Trail by age			
Percent interested or very			
Age	interested		
18 - 24	36%		
25 - 34	35%		
35 - 44	42%		
45 - 54	18%		
55 - 64	19%		
65 or older	29%		

Oyster dining habits by age		
Age	Percent who have eaten an oyster in a restaurant in last 12 months	
18 - 24	67%	
25 - 34	63%	
35 - 44	71%	
45 - 54	61%	
55 - 64	48%	
65 or older	46%	

Oyster dining habits by age		
Age	Percent who have eaten an oyster in a restaurant 3 or more times in last 12 months	
18 - 24	22%	
25 - 34	26%	
35 - 44	43%	
45 - 54	22%	
55 - 64	14%	
65 or older	8%	





Appendix 8.1: Consumer survey insights

Consumer Perceptions of Eating Oysters in Summer		
Safe and good during summer	17.83%	
Safe, but not as good during summer	22.48%	
Not safe during summer	9.30%	
Not sure	50.39%	

Consumer familiarity with trail concept?			
Yes		41%	
No		59%	

Top reasons why people not interested in trying oysters are not interested		
They look gross	68.4%	
Believe they are unsafe to eat	22.8%	
Too expensive	12.3%	
Dietary restriction	7.0%	
Other	3.5%	

Please rate how thinking about merroir might affect your future interest in tasting a variety of oysters		
Much more interested	12.40%	
A little more interested	32.56%	
It does not affect my level of interest	48.06%	
Less interested	3.88%	
Much less interested	3.10%	

Consumer perceptions of oyster qualities by state of origin							
	Maine Washington Virginia Maryland North Carolina Louisia						
Good Flavor	47%	33%	38%	44%	43%	43%	
Large	32%	23%	22%	22%	31%	26%	
Small	17%	18%	20%	17%	16%	14%	
High cost	21%	30%	21%	20%	15%	16%	
Low cost	14%	11%	19%	14%	27%	24%	
Available year-round	30%	22%	18%	22%	31%	34%	
Easy to obtain	29%	21%	34%	31%	38%	33%	





Start of Block: Block 22. Q38 This survey is being conducted in support of research by students at the University of North Carolina's Kanan-Flagier Business School. The survey will help us to characterize potential outsiness' and violatory performences for north careness of North Carolina structions and select North Carolina products. We have excided collecting personally identifiable information or personal information except when necessary to validate sampling or crucial to our research questions. Analyses of this research with the made publish variable, but all responses will be represented in aggregate and no participant's specific responses will be published. No one is required to participate in this survey, so by proceeding to the next screen, you are agreeing to participate. End of Block: Block 23 Q37 What is your age? 18 - 24 (1) 25 - 34 (2) 35 - 44 (3) 45 - 54 (4) 55 - 64 (5) 65 or older (6)	Q37 What is your gender? Male (1) Female (2) Other (3) I prefer not to respond (4) End of Block: Block 23 Start of Block: Default Question Block Q1 In what city do you live? Q2 In what county/parish do you live? Q4 In which state do you currently reside? Salect from list (64) I do not reside in the United States (53) End of Block: Default Question Block Start of Block States (53)	O5 if you have visited North Caroline in the last 12 months, what were your reasons for visiting? Check all that apply. If you did not visit, proceed to the next question without checking any options. Business (1) Visiting family/friends (2) Shopping (3) Urban sightseeing (4) Rural sightseeing (5) Outdoor recreation (8) Other (7)
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Q8 Please rate yo	ur interest in the fol Not interested	llowing kinds of Nort Somewhat		ns. Very interested	Q7 Please rate your i	Not interested	ring North Carolina Somewhat		Q8 How frequent decisions?	ow frequently do you rely on the following sources of information to make restaurant							
	(1)	interested (2)	Interested (3)	(4)		(1)	interested (2)	Interested (3)	Very interested (4)	acoustis.	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Almo		
Historic sites (1)	0	0	0	0	Charlotte metro area (1)	0	0	0	0	Web search (1)							
Casual restaurants (2)	0	0	0	0	Raleigh/Durham metro area (2)	0	0	0	0	Social media (2)	0	0	0	0	(
Upscale restaurant (3)	0	0	0	0	Greensboro/Winston- Salem metro area (3)		0	0	0	Yelp/TripAdvisor or similar review							
Breweries (4)	0	0	0	0	Northern coast (including Outer Banks) (4)	0	0	0	0	site (3)	0	0	0	0	(
Wineries (5)	0	0	0	0	Central Coast (including Morehead	0	0	0	0	advertisements (4)	0	0	0	0	(
Aquariums (6)	0	0	0	0	City) (5) Southern Coast					Family/friends (5)	0	0	0	0	(
Museums (7)	0	0	0	0	(including Wilmington) (8)	0	0	0	0	Looking at storefronts (8)	0	0	0	0			
Eco-Tours (8)	0	0	0	0	Western North Carolina (including Asheville and Blue Ridge Mountains) (7)	0	0	0	0								
					End of Block: State												
					Start of Block: Block	k 2											





Q9 How frequently d	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Almost Always (5)	Q10 were you familiar wi promote a local food				ing this survey, ops" designed to		ased on the foll	owing statement	g decisions? Pleas ts. Sometimes		Almost
Your own						**************************************	, bevelage, or o	ondrar element.				Never (1)	Rarely (2)	(3)	Often (4)	always (
experience (1)	0	0	0	0	0	○ Yes (1)					I choose foods that are					
Friends/family (2)	0	0	0	0	0	○ No (2)					grown or produced locally (1)	0	0	0	0	0
Search engines (Bing, Google, etc.) (3)	0	0	0	0	0	Q11 Please rate you					I choose foods that are nutritious (2)	0	0	0	0	0
Social media (Facebook, Twitter,							Not interested (1)	Somewhat interested (2)	Interested (3)	Very interested (4)	I choose					
LinkedIn etc.) (4)	0	0	0	0	0	Beer trail (1)			0		foods that are affordable (3)	0	0	0	0	0
Online full service travel site (Expedia, Orbitz,	0	0	0	0	0		0	0	0	0	I choose foods I am					
Priceline, etc.) (5)	0					Wine trail (2)	0	0	0	0	familiar with (4)	0	0	0	0	0
Travel provider website (airline, hotel, tour, etc.) (6)	0	0	0	0	0	BBQ trail (3)	0	0	0	0	I choose foods that are tasty (5)	0	0	0	0	0
Destination website (official visitor's site						Oyster trail (4)	0	0	0	0	1227 (0)					
for state/city/attraction) (7)	0	0	0	0	0	Music trail (5)	0	0	0	0	End of Block:	Block 4				
Travel review sites (Yelp, TripAdvisor, etc.) (8)	0	0	0	0	0	History trail (6)	0	0	0	0	Start of Block					
Destination printed						Other (7)	0	0	0	0		ever eaten an o	yster			
materials (brochures, pamphlets, etc.) (9)	0	0	0	0	0						O Yes (1					
Travel club/agency						End of Block: Bloc	k 3				O No (2)					
(AAA, etc.) (10)	0	0	0	0	0	Start of Block: Blo	ck 4				End of Block:	Block 5				
											Start of Block Display This Qu					
End of Block: Block												ever eaten an oy:	ster? = Yes			
Start of Block: Bloc	k 3										Q14		Re	aw on half shell		Cooked on





se rate y		agreement wit		Neither		5200 (3	O Zero (1)	state's oysters	Small in	Large in	Good	Easy to	Available	Low cost	High co
	Have not tried (1)	disagree (2)	Disagree (3)	agree nor disagree (4)	Agree (5)	Strongly agree (6)	1 or 2 times (2)		size (1)	size (2)	flavors (3)	11.5	year- round (5)	(6)	(7)
ke ters							2 to 5 times (3)	Maine (1)							
raw the hell	0	0	0	0	0	0	0 6 to 12 times (4)	Washington (2)							
							More than 12 times (5)	Maryland (3)							
							End of Block: Block 7	Virginia (4)							
e I	0	0	0	0	0	0	Start of Block: Block 8 Display This Question:	North	_			_	_		_
							If Have you ever eaten an oyster? = No	Carolina (5)							
							Q16 Would you consider trying an oyster?	Louisiana (6)							
							Yes (1) Maybe (2)								
on f	0	0	0	0	0	0	○ No (3)	End of Block Start of Block							
d. 3)							End of Block: Block 8	Display This Qu If Would yo	estion:		ar2 l= No				
							Start of Block: Block 9	Q38 In what n							
	Block 6						Display This Question: If Would you consider trying an oyster? != No	O Januar	-	- 61	10				
	estion:	n oyster? = Yes						O May -	August (2)						
								O Septer	nber - Dec	ember (3)					
								End of Block	Block 26						
								Start of Block	: Block 10						





Display This Question: If its what month range is your birtholay? = January - April And Woold you consider prying an oyster? = No Q18 Many rural fishing communities have experienced an economic downtum over recent decades as the commercial fishing industry has declined. Oyster production may be a more sustainable source of jobs for these communities. By providing systems, you support these communities by providing sustainable jobs for oyster producers and the other businesses that support them. Based only on the statement above and your knowledge prior to taking this survey, how would you rate your level of agreement with the statement? Strongly agree (1) Agree (2) Neither agree nor disagree (3) Disagree (4) Strongly disagree (6) End of Block: Block 10 Start of Block: Block 10 Start of Block: Block 11 Oxplay This Question: If it what month range is your birtholay? = May - August. And Woold you consider lrying an ayalar? In No.	Oysters play a valuable role in coastal acosystems. One benefit that cysters provide is water filtration. A single cyster can clean up to 50 gallions of water a day. By purchasing cysters, you provide incentives for cyster producers to increase the number of cysters water. This will lead to cleaner water and healthier ecosystems. Based only on the statement above and your knowledge prior to taking this survey, how would you rate your level of agreement with the statement? Strongly agree (1) Agree (2) Neither agree nor disagree (3) Disagree (4) Strongly disagree (6) End of Block: Block 11 State of Block: Block 11 State of Block: Block 17 Display The Question: If Would you consider trying an cyster? In No Q20 In a restaurant, would you be willing to pay \$2.50 for a single cyster (no discount for buying multiple) served on the half shell (either raw or cooked)? Display This Question: If no restaurant, would you be willing to pay \$2.50 for a single cyster (no discount for buying multiple) served on the half shell (either raw or cooked)?	In a restaurant, would you be willing to pay \$1.50 for a single cyster (no discount for buying multiple) served on the half shell (either raw or cooked)? Ves. (1) No. (2) Display Third Question: If in a restaurant, would you be willing to pay \$2.50 for a single cyster (no discount for buying multiple) served on the half shell (either raw or cooked)? Ves. (1) No. (2) Display Third Question: If in a restaurant, would you be willing to pay \$1.50 for a single cyster (no discount for buying multiple) served on the half shell (either raw or cooked)? Ves. (1) No. (2) Display Third Question: If in a restaurant, would you be willing to pay \$1.50 for a single cyster (no discount for buying multiple) served on the half shell (either raw or cooked)? Ves. (1) No. (2) Siling To pay \$2.00 for a single cyster (no discount for buying multiple) served on the half shell (either raw or cooked)? Ves. (1) No. (2) Siling To End of Stock (if is a restaurant, would you be willing to pay \$2.00 for a single cyster (no discount for buying multiple) served on the half shell (either raw or cooked)? Oraplay Third Question: If in a restaurant, would you be willing to pay \$1.50 for a single cyster (no discount for buying multiple) served on the half shell (either raw or cooked)?
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Q24 In a restaurant, would you be	End of Block: Block 17	
willing to pay \$1.00 for a single oyster (no discount for buying multiple) served on the half shell (either raw or cooked)?	Start of Block: Block 19	Most wild cysters reproduce during the summer which can cause them to have a more "squishy" texture than at other times of the year. Farm-raised cysters are indistinguishable in
()	Display This Question:	taste and texture from wild oysters (outside of the summer months). Farm-raised oysters are
○ Yes (1)	If Would you consider trying an oyster? != No	also sterile and do not reproduce. This means their taste and texture is consistent throughout
0		the yearincluding during the summer.
O No (2)	Q27 Which of the following statements do you agree with most?	Warmer months do pose more of a threat to water quality and food safety, but cysters that are
Skip To: End of Block If In a restaurant, would you be willing to pay \$1.00 for a single cyster (no discount for buying mu = Yes	Oysters are unsafe to eat during the summer (1)	sold in restaurants and stores are monitored in the water and carefully handled to ensure they remain safe to eat throughout the year.
Skip To: End of Block If In a restaurant, would you be willing to pay \$1.00 for a single cyster (no discount for buying mu = No	Oysters are safe to eat during the summer, but do not taste as good as during other seasons (2)	End of Block: Block 21
Display This Question:	Ovsters are safe to eat during the summer and taste as good as during other seasons	Start of Block: Block 22
If In a restaurant, would you be willing to pay \$3.50 for a single oyster (no discount for buying mu =	(3)	Display This Question:
No		If Would you consider trying an oyster? != No
000	Not sure (4)	
Q25 In a restaurant, would you be willing to pay \$3.00 for a single oyster (no discount for buying multiple) served on the half shell (either raw or cooked)?	End of Block: Block 19	Q30 'Merroir' is the concept that an oyster's size, texture, color, flavor, and other qualities are determined by that oyster's unique growing conditions, such as water temperature, water salinity, presence of sea grasses in the water, etc. Each batch of oysters from a producer will
	Start of Block: Block 20	be a little different and cysters from different areas tend to have different merroirs.
○ Yes (1)	Display This Question:	
O No (2)	If Would you consider trying an oyster? != No	Merroir is analagous in many ways to "terroir", which is typically discussed in the context of tasting wine.
Skip To: End of Block II In a restaurant, would you be willing to pay \$3.00 for a single cyster (no discount	Q28 Do you ever consider whether an oyster is farm-raised or wild when choosing an oyster?	Please rate your familiarity with the concept of merroir before taking this survey.
for buying mu	Yes, I prefer farm-raised oysters (1)	Extremely familiar (1)
ior su') sig mu 110	Yes, I prefer wild harvest oysters (2)	Very familiar (2)
Display This Question:	O No (3)	
If In a restaurant, would you be willing to pay \$3.50 for a single cyster (no discount for buying mu =	O 140 (3)	Somewhat familiar (3)
160	End of Block: Block 20	O Not so familiar (4)
Q28 In a restaurant, would you be	Start of Block: Block 21	
willing to pay \$4.00 for a single cyster (no discount for buying multiple) served on the half shell	Display This Question:	Not at all familiar (5)
(either raw or cooked)?	If Would you consider trying an oyster? != No	O Disagree (6)
○ Yes (1)		O Disagree (0)
	Q29 Myth-busting:	End of Block: Block 22
○ No (2)	An old piece of advice, which many people have heard, is that one should not leat oysters during the summer. However, this is not true.	Start of Block: Block 23
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Display This Question: If Would you consider trying an oyster? != No	Q36 How many people related to you live in your household? Please include yourse
	O ₁ (1)
Q31 Please rate how thinking about merroir might affect your future interest in tasting a v of oysters.	2 (2)
○ Much more interested (1)	3 or more (3)
A little more interested (2)	
It does not affect my level of interest (3)	Q35 What is your estimated household income?
C Less interested (4)	O Less than \$15,000 (1)
○ Much less interested (5)	O Between \$15,000 and \$29,999 (2)
End of Block: Block 23	O Between \$30,000 and \$49,999 (3)
Start of Block: Block 24	O Between \$50,000 and \$74,999 (4)
Display This Question: If Would you consider trying an oyster? = No	○ Between \$75,000 and \$99,999 (5)
Q32 What factors prevent you from trying cysters?	O Between \$100,000 and \$149,999 (6)
Dietary restrictions (1)	O Between \$150,00 and \$199,999 (7)
They look gross (2)	\$200,000 or more (8)
	End of Block: Block 25
They are too expensive (3)	Start of Block: Block 21
Other (5)	Q39 Is there anything else you would like to tell us?
Other (5)	
End of Block: Block 24	
Start of Block: Block 25	





- 16 respondents
- Administered through Qualtrics
- All respondents from North Carolina
- Questions on following slides





Appendix 8.2: Restaurant survey insights

- 43% of respondents care whether oysters are wild or cultivated
 - 67% of those who care say they prefer wild
- "Environmental benefits" and "Voiced demand by customers" were the most convincing arguments for adding oysters to (or keeping oysters on) menus
- "Contributing to environmental benefits" and "Contributing to eating local" were the most convincing arguments for participating in the NC Oyster Trail
- 29% of restaurants said NC oysters were easy to obtain

Restaurant perceptions of eating oysters in s	summer
Safe and good during summer	29%
Safe, but not as good during summer	43%
Not safe during summer	14%
Not sure	14%





Appendix 8.2: Restaurant survey insights

- 71% of restaurants surveyed were interested or very interested in participating in the oyster trail
 - All of the interested or very interested restaurants were willing to make all suggested contributions* to participate
 - All of the interested or very interested restaurants were willing to pay an annual fee to participate
 - Average maximum fee these restaurants were willing to pay was \$600
- There was a great deal of interest in Oyster Trail participation, particularly among Outer Banks seafood restaurants





UNC Kenan-Flagler Oyster Trail	Q34 In what city is your restaurant/business located?	Q3 Who are your customers? Check all that apply.
Destaurant Comment		Locals (1)
Restaurant Survey		Locals (1)
		Out-of-town visitors (2)
Start of Block: Block 32	Q35 In what county/parish is your restaurant/business located?	Families with children (3)
Q51 This survey is being conducted by students at UNC Chapel Hill's Kenan-Flagler Business		Single individuals (4)
School. The student team conducting the research is working with several stakeholder groups to	End of Block: Block 16	
evaluate the feasibility of creating a North Carolina Oyster Trail and to provide recommendations to the State of North Carolina.	Start of Block: Block 15	Couples (5)
		Groups (6)
Your individual responses to this survey will be kept confidential among the researchers and all published results will only feature aggregations (e.g. averages, percentages) of data from large	Q2 Which of these categories describe your business? Check all that apply.	
numbers of respondents.	(If none apply, proceed to next question without checking any option).	End of Block: Block 1
Your participation is optional, but your thorough completion of as many questions as possible is	Oyster bar (1)	Start of Block: Block 2
very helpful and appreciated. Please click to proceed to the survey.	Seafood (2)	Q4 In the last 90 days, have you featured oysters on your menu?
Thanks!		
	Fine dining (3)	○ Yes (1)
End of Block: Block 32	Casual dining (4)	O No (2)
Start of Block: Default Question Block	Breweny/brew pub (5)	Not sure (3)
Q33 What is the name of your restaurant/business?		
	Winery/wine bar (6)	Display This Question:
50	End of Block: Block 15	If In the last 90 days, have you featured oysters on your menu? = Yes
End of Block: Default Question Block	Start of Block: Block 1	Q9 in the last 90 days, have you featured North Carolina cysters on your menu?
Start of Block: Block 16	State of Block, Slock 1	
Q39 In which state is your restaurant/business located?		○ Yes (1)
		O No (2)
▼ Alabama (1) I do not reside in the United States (53)		O Not sure (3)
		End of Block: Block 2
		Start of Block: Block 24
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Duplay This Question: If it the last 90 days, have you featured cysters on your menu? In Yes Q44 Would you consider adding cysters to your menu at any point in the future? Yes (1) Maybe (2) No (4) End of Block: Block 24 Start of Block: Block 25 Start of Block: Block 3 Duplay This Question: If it the last 90 days, have you featured cysters on your menu? ** Yes Q5 How do (did) you serve cysters? Check all that apply. As part of a dish (e.g. po' boy, cyster slew) (1) Raw on the half shell (2) Cooked on the half shell (3) Other cooked, not part of another dish (e.g. fried) (4) End of Block: Block 3 Start of Block: Block 24 Duplay This Question: If is the last 90 days, have you featured cysters on your menu? ** Yes	O21 Which of the following pieces of information do you include on your cyster menu? Check all that apply. If none, proceed to next question without checking any options. Which state each cyster is from (e.g. North Carolina, Washington) (1) The name of the producer (e.g. Taylor Shellfish Farms, Carolina Marioulture) (2) The geographic area the cyster is from (e.g. Bodie Island, Pamilico Sound, Williapa Bay) (3) Whether the cyster is farm-raised or wild harvest (4) Tasting notes (e.g. "briny", "melon flavors") (5) Notes about size/texture/shape (e.g. "large", "chewy", "deep cup") (8) Detail about the individual people producing the cysters (e.g. "John Smith", "family-run", "3rd generation") (7) The producer's logo (8) End of Block: Block 31 Dopaly This Question: If How do (dd) you serve cysters? Check all that apply: = As past of a dish (e.g. po' boy, cyster stew) Or how do (dd) you serve cysters? Check all that apply: = Other cooked, not past of another dish (e.g. fried)	Q49 What price (on average) do you estimate that you pay your suppliers, per dyster, for oyster that you do not serve on the half shell? Up to \$0.10 (1) \$0.11 to \$0.20 (2) \$0.21 to \$0.30 (3) \$0.31 to \$0.40 (4) \$0.41 to \$0.50 (5) \$0.51 to \$0.90 (6) \$0.51 to \$0.90 (6) \$0.51 to \$0.90 (6) \$0.51 to \$0.90 (6) \$0.51 to \$0.90 (9) \$0.51 to \$0.90 (9) \$0.51 or more (10) End of Block: Block 31 Start of Block: Block 31 Start of Block: Block 17 Display This Question: If Now do (did) you serve oysters? Check all that apply; = Raw on the half shell. Or How do (did) you serve oysters? Check all that apply; = Cooked on the half shell.
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Q7 What price (on average) do you estimate that you pay your suppliers, per cyster, for cysters that you serve on the half shell? (Either raw or cooked) Up to 50.20 (1) S0.21 to 50.40 (2) S0.41 to 50.80 (3) S0.61 to 50.80 (4) S0.81 to 51.00 (5) \$1.01 to 51.20 (6) \$1.20 to 51.40 (7) \$1.41 or more (8) End of Block: Block 17 Start of Block: Block 47 Start of Block: Block 47 Start of Block: Block 37 Only by M9 Coestion: If How do (dd) you serve cysters? Check all that apply. = Raw on the half shell Or how do (dd) you serve cysters? Check all that apply. = Cooked on the half shell	G10 What price (on average) do you estimate that you charge your customers, per cyster, for oysters that you serve on the half shell? (Either raw or cooked) Up to \$0.50 (1) \$0.51 to \$1.00 (2) \$1.01 to \$1.50 (3) \$1.51 to \$2.00 (4) \$2.01 to \$2.50 (6) \$2.51 to \$3.00 (6) \$3.01 to \$3.50 (7) \$3.55 to \$4.00 (8) \$4.00 or more (9) End of Block Block 27 Deplay This Question: If is the last 90 days, have you festured cysters on your ment? = Yes Q11 From what source(s) do you buy your cysters? Check all that apply. Regional disbributor (1) Local market (2) Display This Question: If is the last 90 days, have you festured cysters on your ment? = Yes	Q12 Please provide the names of up to 3 suppliers from whom you purchase oysters. Supplier 1 name (1) Supplier 2 name (2) Supplier 3 name (3) End of Block 1804 27 Start of Block Block 27 Start of Block Block 32 Display The Question. If Please provide the names of up to 3 suppliers from whom you purchase oysters. Supplier 1 name is Not Emply.
, again to take		1,000,000





Q50 To the best true about each		pinion, which of the following states	ments are	Q24 How would y	ou rate the important Not important (1)	Somewhat	actors when sourci Important (3)	Very important		Q21 For each of the following states, please check all of the qualities you believe a state's cysters.								
	\${Q12/ChoiceTextEntryValue/1}	if Please provide the names of up to 3 suppliers from whom you purchase oysters. Supplier 2 name is Not Empty	If Please provide the nam to 3 suppliers from who purchase oysters. Supplier Is Not Empty	Price (1)	(1)	important (2)	(S)	(4)		Small in size (1)	Large in size (2)	Good flavors (3)	Easy to obtain (4)	Available year- round (5)	Low cost (6)	High cos (7)		
	(1)	Is Not Empty \${Q12/ChoiceTextEntryValue/2} (2)		Quality (2)	0	0	0	0	Maine (1)									
Low-cost (1)				Specific producer(s) (3)	0	0	0		Washington (2)									
Can buy large basket of goods from this				Consistent availability of minimum	0	0	0	0	Maryland (3)									
supplier (2) Good customer service/delivery (3)				quantity (4)					Virginia (4) North									
Good customer service/delivery (4)				Start of Block: Bl	lock 5		Carolina (5) Louisiana (6)											
High-quality (5)					um. I daya, have you feature	ed oyatera on your m												
Consistently able to supply your needs (6)					dering location while s		hich statement mos	t applies?		ck: Block 3								
Offers NC oysters (7)				O You try to	source oysters from	another preferred s	tate/region (2)		Display This If In the		ave you featu	red oysters or	your menu?	e Yes				
Overall, you are happy with this supplier (8)					source oysters from				Q19 Do you		er whether ar		rm-raised or	r wild when s	ourcing oys	ters?		
End of Block: E	Block 32			Other (5)				-	○ Yes,	you prefer w	ild harvest o	ysters (2)						
Start of Block: Display This Ques	Block 22	ı your menu? = Yes	-	End of Block: Bl Start of Block: B Display This Quest If Would you o	lock 19	to your menu at any	point in the future? !=	No	End of Bloc	k: Block 31								





the yearincluding during the summer.	sed only on the statement above and your knowledge prior to taking this survey, how would		ow persuasive you toing them on) your n	ind each of the follo	point in the future? != ! owing potential reaso	220.00 (200.000)
warmer months do pose more of a threat to water quality and food safety, but dysters that are	u rate your level of agreement with the statement? Strongly agree (1)	Benefits to rural	Unpersuasive (1)	Somewhat persuasive (2)	Persuasive (3)	Very persuasive (4)
sold in and to restaurants and stores are monitored in the water and carefully handled to ensure they remain safe to eat throughout the year.	○ Agree (2)	communities (1)	0	0	0	0
End of Block: Block 26	Neither agree nor disagree (3) Disagree (4)	benefits (2) Oysters are a	0	0	0	0
Start of Block: Block 18 Q15 'Merroir' is the concept that an oyster's size, texture, color, flavor, and other qualities are	Strongly disagree (5)	high-margin product (3)	0	0	0	0
determined by that oyster's unique growing conditions, such as water temperature, water salinity, presence of sea grasses in the water, etc. Each batch of oysters from a producer will	d of Block: Block 25	Voiced demand by customers (4)	0	0	0	0
Merroir is analagous in many ways to "terroir", which is typically discussed in the context of 4 dating wine.	art of Block: Block 26 Oysters play a valuable role in satal ecosystems. One benefit that oysters provide is water filtration. A single cyster can an up to 50 gallons of water a day. By purchasing ovaters, you provide insertives for oyster	Your own taste for cysters (5)	O ook 21	0	0	0





Start of Block: Block 20 Q17 Before taking this survey,		rolina Oyster Trail w reasons to participa Unpersuasive (1)				Q25 How interested is your business in participating in a North Carolina Oyster Trail? Not at all interested (t)
were you familiar with the concept of a visitor "trail" that includes multiple "stops" designed to promote a local food, beverage, or cultural element?	Increase in number of customers (1)	0	0	0	0	Somewhat interested (2) Interested (3)
Yes (1) No (2)	Ability to charge higher prices for North Carolina	0	0	0	0	Very interested (4)
End of Block; Block 20	oysters (2) Increased					End of Block: Block 7
Start of Block: Block 6 Display This Question:	publicity for your business (3) Ability to	0	0	0	0	Start of Block: Block 8 Display This Question:
Lighay I not question: If Woods' you consider adding cysters to your menu at any point in the future? I+ No	contribute to rural communities (4)	0	0	0	0	If Would you consider adding systems to your menu at any point in the future? Its No Q24 What contributions might your business be willing to make in exchange for the ability to participate in a North Carolina Oyster Trail? Check all that apply.
	contribute to environmental quality (5)	0	0	0	0	Commitment to serving some North Carolina cysters whenever available (1)
	Ability to contribute to "eating local" (6)	0	0	0	0	□ bistributing Oyster Trail pamphlets (which may advertise other businesses that sell North Caroline oysters) (2) □ Listing state of origin on cyster menu (3)
	End of Block: Blo	ock 6				Educating customers about merroir (4)
	Start of Block: B Display This Questi					Educating customers about environmental benefits (5)
		on. insider adding oysters	to your menu at any	point in the future? !=	No	Educating customers about benefits to rural communities (6) Participating annually in a survey similar to this one (7)
						End of Block: Block 11 Start of Block Hock 11 Displey This Question: If Would you consider adding cysters to your menu at any point in the future? != No
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Start of Block: Block 13			
Start of Block. Brook 13			
Q32 Is there anything else you would like to tell us?			
·			
12			
<u>~</u>	<u> </u>		
<u>-</u>			
End of Block: Block 13			
Start of Block: Block 30			
Q31 If you are open to being contacted in the future	about the development of the North		
Carolina Oyster Trail, please provide the following in	nformation:		
Carolina Oyster Trail, please provide the following in			
Carolina Oyster Trail, please provide the following i			
Carolina Oyster Trail, please provide the following i Contact name (1) Phone number (xxx-xxx-xxxxx) (2)			
Carolina Oyster Trail, please provide the following i Contact name (1) Phone number (xxxx-xxxxx) (2)			
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